

**Prediction of A Comparative Effectiveness Study of Major
Glycemia-lowering Medications for Treatment of Type 2
Diabetes**

DUPLICATE - GRADE

October 13, 2021

1. RCT Details

This section provides a high-level overview of an **ongoing** RCT that the described real-world evidence study is trying to replicate as closely as possible given the remaining limitations inherent in the healthcare databases.

1.1 Title

A Comparative Effectiveness Study of Major Glycemia-lowering Medications for Treatment of Type 2 Diabetes (GRADE) ([GRADE Trial](#)) ([NCT01794143](#))

1.2 Intended aim(s)

To compare glycemia-lowering effectiveness and patient-centered outcomes when commonly used diabetes medications, are combined with metformin. We focus on the glimepiride versus sitagliptin contrast.

1.3 Primary endpoint in the trial

The maintenance of metabolic control is defined as time to primary failure with an HbA1C \geq 7.0%(53mmol/mol), confirmed at the next quarterly visit, while receiving maximally tolerated doses of both metformin up to 2,000 mg/day and the assigned medication

1.4 Required power for primary endpoint and noninferiority margin (if applicable)

The trial is to enroll 5000 patients over 3 years where 40% are to be enrolled over the first 18 months and 60% are to be enrolled over the final 18 months using the method of Lachin and Foulkes (1986). The trial is expected to have 7 years of total duration with 4% follow-up loss per year which would yield 90% power to detect a 25% difference (hazard ratio of 0.75) among any two of the four study exposures

1.5 Secondary endpoint for replication (assay sensitivity) and RCT finding

To assess:

- 1) time to severe hypoglycemic episode in the follow-up period
- 2) mean HbA1C change from baseline approximately 6 months after cohort entry date

1.6 Trial estimate

The trial is ongoing and scheduled to complete in July 2021.

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2. Person responsible for implementation of replication in Aetion

Sushama Kattinakere Sreedhara, MBBS, MSPH, implemented the study design in the Aetion Evidence Platform. She is not responsible for the validity of the design and analytic choices. All implementation steps are recorded, and the implementation history is archived in the platform.

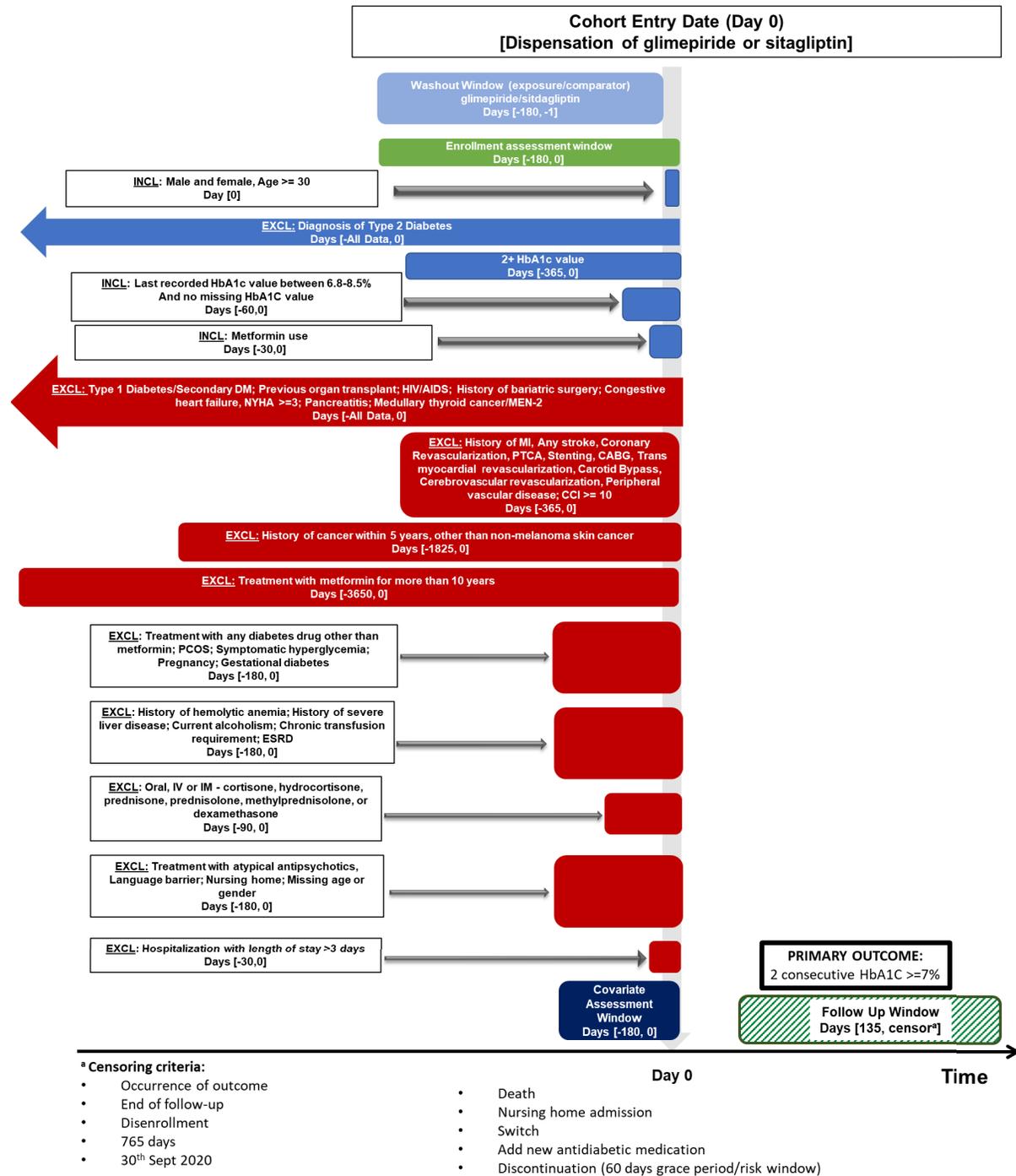
3. Data Source

Optum CDM

4. Study Design Diagram

The study design diagram visualizes key aspects of the longitudinal study design for expedited review.
Figure 1.

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5. Cohort Identification

5.1 Cohort Summary

This study will involve a new user, propensity score-matched cohort design comparing glimepiride to sitagliptin. Treatments in both arms are administered in combination with metformin. Patients will be required to have continuous enrollment during a baseline period of 180 days before initiation of glimepiride or sitagliptin. The analyses will be restricted to individuals with type 2 diabetes mellitus who have been previously treated with metformin.

5.2 Important steps for cohort formation

New use of glimepiride (exposure) is defined as no use of the exposure drug within 180 days prior to index date. New use of sitagliptin (comparator) is defined as no use of the comparator drug within 180 days prior to index date. Eligible patients are required to be new users with respect to both exposure and comparator groups (i.e., no use of both exposure and comparator drugs) within 180 days prior to meeting all eligibility criteria and initiation of exposure.

5.2.1 Eligible cohort entry dates

Liraglutide indication as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus was approved by FDA on Jan 25, 2010 (the approval of glimepiride for the same indication was antecedent to 2010 and sitagliptin was 2006). Thus, the initial eligible cohort entry date is the first date after the FDA approval available in the data. The database used is Optum CDM because lab results/values are available in this database for a subset of laboratory tests, including the A1C tests. The following eligible cohort entry dates were included:

- Optum CDM: Jan 25, 2010 – Sept 30, 2020 (end of available data)

5.2.2 Specify inclusion/exclusion criteria for cohort entry and define the index date

Inclusion and exclusion criteria were adapted from the trial as closely as possible. Definitions for all inclusion/exclusion are provided in (**Appendix A**) and are summarized in the flowcharts below.

5.3 Flowchart of the study cohort assembly

Glimepiride vs Sitagliptin

	Glimepiride vs Sitagliptin	
	Excluded	Included
All patients		78,779,380
Did not meet cohort entry criteria [Liraglutide vs Sitagliptin] Between Jan 25, 2010 and Sep 30, 2020, Cohort entry date (CED, 0)		1,032,484
Excluded due to insufficient enrollment 180 days with 30 days gap allowed	-138,451 (13%)	894,033
Excluded due to prior use of exposure 180 days wash out	-351,601 (39%)	542,432
Excluded due to prior use of reference 180 days wash out	-413,553 (76%)	128,879
Excluded because patient qualified in >1 exposure category	-531 (<1%)	128,348
Excluded based on Inclusion 1- Age >=30 on CED	-975 (<1%)	127,373
Excluded based on Inclusion 2- DM Type 2 [-730, 0]	-3,336 (3%)	124,037
Excluded based on Inclusion 3a: Lab value HbA1c (< 6.7) [based on last recorded value, -60, 0]	-4,876 (4%)	119,161
Excluded based on Inclusion 3b: Lab value HbA1c (> 8.5) [based on last recorded value, -60, 0]	-10,255 (9%)	108,906
Excluded based on Inclusion 3c: Lab value HbA1c [less than 2 counts within 365 days]	-79,879 (73%)	29,027

Excluded based on Inclusion 3b: Lab value HbA1c [no value recorded, -60, 0]	-10,406 (36%)	18,621
Excluded based on Inclusion 4: Metformin only [-30, 0]	-3,917 (21%)	14,704
Excluded based on Exclusion 1a: Type 1 DM [-730, 0]	-743 (5%)	13,961
Excluded based on Exclusion 1b: Secondary DM [-730, 0]	-189 (1%)	13,772
Excluded based on Exclusion 2: Gestational DM [-180, 0]	-0 (<1%)	13,772
Excluded based on Exclusion 3a: Antidiabetic agents except metformin [-180, 0]	-1,694 (12%)	12,078
Excluded based on Exclusion 3b: Antidiabetic agents except metformin on CED	-0 (<1%)	12,078
Excluded based on Exclusion 4: Metformin more than 10 years (60-day gap allowed) [-3650, 0]	-3 (<1%)	12,075
Excluded based on Exclusion 5: Polycystic ovary syndrome [-180, 0]	-6 (<1%)	12,069
Excluded based on Exclusion 6: Symptomatic hyperglycemia [-180, 0]	-20 (<1%)	12,049
Excluded based on Exclusion 7: Any hospitalization more than 3 days within 30 days prior	-37 (<1%)	12,012
Excluded based on Exclusion 8: Any major cardiovascular event in previous year [-365, 0]	-22 (<1%)	11,990
Excluded based on Exclusion 9: Pregnancy [-180, 0]	-1 (<1%)	11,989
Excluded based on Exclusion 10: Bariatric surgery [-730, 0]	-9 (<1%)	11,980

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Excluded based on Exclusion 11: Heart failure NHYA 3 or greater [-730, 0]	-54 (<1%)	11,926
Excluded based on Exclusion 12: History of pancreatitis [-730, 0]	-31 (<1%)	11,895
Excluded based on Exclusion 13: History of MEN-2 [-730, 0]	-0 (<1%)	11,895
Excluded based on Exclusion 14: ESRD [-180, 0]	-2 (<1%)	11,893
Excluded based on Exclusion 15: Cancer [-1825, 0]	-250 (2%)	11,643
Excluded based on Exclusion 16: Liver disease [-180, 0]	-17 (<1%)	11,626
Excluded based on Exclusion 17: Alcohol abuse or dependence [-180, 0]	-14 (<1%)	11,612
Excluded based on Exclusion 18: Organ Transplant [all available data, 0]	-1 (<1%)	11,611
Excluded based on Exclusion 19: Use of oral or systemic glucocorticoids [-90, 0]	-157 (1%)	11,454
Excluded based on Exclusion 20: Atypical antipsychotics [-180, 0]	-2 (<1%)	11,452
Excluded based on Exclusion 21: Hemolytic anemia [-180, 0]	-3 (<1%)	11,449
Excluded based on Exclusion 22: CCI score >=10	-0 (<1%)	11,449
Excluded based on Exclusion 23: Non-compliance [-180, 0]	-15 (<1%)	11,434
Excluded based on Exclusion 24: HIV/AIDS [all available data, 0]	-5 (<1%)	11,429
Excluded based on Exclusion 25: Nursing home [-180, 0]	-5 (<1%)	11,424

Excluded based on Exclusion 26a: Age Missing	-0 (<1%)	11,424
Excluded based on Exclusion 26b: Gender Missing	-0 (<1%)	11,424
Final cohort		11,424

6. Variables

6.1 Exposure-related variables:

Study drugs:

1. New initiation of glimepiride (a sulfonylurea) is defined as no use of glimepiride within 180 days before treatment initiation (washout period). New users of glimepiride are not allowed to receive any other antidiabetic drug other than metformin within 180 days prior to treatment initiation.

Comparator agent:

New initiation of sitagliptin, a dipeptidyl peptidase-4 inhibitor, defined as no use of sitagliptin within 180 days before treatment initiation (washout period). New users of sitagliptin are not allowed to receive any other antidiabetic drug other than metformin within 180 days prior to treatment initiation.

6.2 Preliminary Covariates:

- Age
- Gender
- Combined Comorbidity Index (CCI), measured over the baseline covariate assessment period, defined as 180 days prior to and including index date.

The covariate listed above represents only a small subset of the covariate vector that will ultimately be controlled for in the design and analysis. We use the covariate above only for initial feasibility analyses to judge whether there is likely to be sufficient overlap between treatment groups to proceed with the study. Remaining covariates are defined only after the study has passed the initial feasibility analysis and the initial power assessment and are listed in Table 1 (**Appendix B**).

6.3 Outcome variables and study follow-up:

6.3.1 Outcome variables

Effectiveness outcome variables of interest (definitions provided in **Appendix A**):

- **Primary outcome:** Time to primary metabolic failure is defined by time to event (2nd consecutive HbA1C value $\geq 7\%$) occurring at least 135 days after cohort entry date. Similar to the quarterly assessments used in the trial, time during follow up will be discretized into 90-day blocks.

Note: In the trial, HbA1C is measured every quarter and time to metabolic failure is defined as time to an initial HbA1c $\geq 7\%$, subsequently confirmed at the next quarterly visit. So, the outcome can be reached only after 6 months of treatment, unless at 3 months the HbA1C is $>9\%$ and is confirmed with HbA1C after 3-6 weeks is also $>9\%$ then the outcome is considered as reached.

- **Secondary outcomes:**

To assess –

- 1) Time to severe hypoglycemic episode in the follow-up period
- 2) Mean HbA1C approximately 6 months after cohort entry date (based on hbA1c values assessed 180 days +/- 45 days after cohort entry)

6.3.2 Study follow-up

Both as-treated (AT) and intention-to-treat (ITT) analyses will be conducted with treatment defined as the index drug on day of cohort entry. An allowable gap of 60 days between records indicating each treatment will qualify as “continuous therapy” with respect to follow-up in the as-treated analysis.

The follow-up will start 1 day after drug initiation for secondary outcomes. For the primary outcome of HbA1C value, follow up will begin 135 days after cohort entry date, and will continue until the earliest date of the following events:

- The first occurrence of the outcome of interest
- The date of end of continuous registration in the database (disenrollment or end of data),
- End of the study period (Sept 30th, 2020),

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- Measured death event occurs,
- 765 days after CED,
- Switch,
- Discontinuation of exposure/comparator/metformin (60 days allowable grace period and risk window),
- Addition of another antidiabetic drug,
- Nursing home admission: Nursing home admissions are considered a censoring event because the data sources utilized typically provide little to no data on a patient, particularly on drug utilization, after admission. We will utilize this as an exclusion reason for cohorts for the same reason.

In the secondary ITT analysis, we will not censor for discontinuation or switching among study drugs

Note: To decrease the incidence of missing values of the outcome (specifically, missing of HbA1c values), we required that the eligible patients had at least 2 HbA1c measurements recorded within 365 days before and including cohort entry date. This will increase the probability of including in the final cohort patients who are adherent to a routinely HbA1c testing and, consequently, will decrease the frequency of missing values of the outcome.

7. Initial Feasibility Analysis

Aetion report name:

Optum CDM, Glimepiride vs Sitagliptin:

Induction window cohort analysis: <https://bwh-dope.aetion.com/projects/details/1734/rwrs/71827>

Outcome period (analytic cohort) analysis: <https://bwh-dope.aetion.com/projects/details/1734/rwrs/70813>

Date conducted: 06/23/2021 and 06/01/2021

Complete Aetion feasibility analysis using age, gender and cci as the covariates and the primary endpoint (Section 6.3.1) as the outcome. No measures of association will be computed, nor will incidence rates be stratified by treatment group.

- Report patient characteristics by treatment group
 - Optum CDM

	Outcome period (analytic cohort)		
Variable	Sitagliptin - Comparator	Glimepiride - Exposure	Difference
Number of patients	2,011	4,392	
Age			
...mean (sd)	66.03 (10.31)	65.19 (10.64)	0.08
...median [IQR]	68 [60.00, 73.00]	67 [59.00, 72.00]	
Gender			
Male	995 (49.48%)	2,430 (55.33%)	-0.12
Female	1,016 (50.52%)	1,962 (44.67%)	0.12
CCI			
...mean (sd)	0.63 (1.6)	0.57 (1.53)	0.04
...median [IQR]	0 [-1, 1]	0 [-1, 1]	
Baseline HbA1C			
...mean (sd)	7.6 (0.47)	7.65 (0.48)	-0.11

...median [IQR]	7.6 [7.2, 8.0]	7.6 [7.2, 8.0]	
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- Report summary parameters of study population **FEASIBILITY- FOR STUDY OUTCOME**

- **Optum CDM, Glimepiride vs Sitagliptin:**

	Glimepiride vs Sitagliptin
Number of patients in full cohort	11,424
Number of patients dropped as incomplete cases	1
Number of patients that did not begin follow-up	5,021
Number of patients in analytic cohort	6,403
Number of events	1,642
Number of person-years	5575.04
Number of patients in group: DPP4i Sitagliptin	2,011
Number of patients in group: GLP-1 Liraglutide	4,392
Risk per 1,000 patients	256.44
Rate per 1,000 person-years	294.53

- Report median follow-up time (which reflects time from cohort entry date, rather than 135 days after cohort entry date) by treatment group (**among analytic cohort**)

- **For Optum CDM**

Patient Group	Glimepiride vs Sitagliptin
Overall Patient Population	237 [165, 407]
Referent – Sitagliptin	228 [161, 363]
Exposure – Glimepiride	241 [167, 431.5]

- Report reasons for censoring in the overall study population
 - **Optum CDM, Glimepiride vs Sitagliptin:**

Reasons	Induction window before follow-up for outcome (days 1-135)	Outcome analysis (days 135 – censor)
Outcome	----	1,642 (25.64%)
Death	16 (0.4%)	27 (0.42%)
Start of an additional exposure	168 (1.47%)	74 (1.16%)
End of index exposure	1,047 (9.17%)	1,885 (29.44%)
Maximum follow-up time (135 days after CED for lag time analysis, 765 days after CED for outcome analysis)	6,403 (56.05%)	535 (8.36%)
Specified date reached	464 (4.06%)	535 (8.36%)
End of patient enrollment	557 (4.88%)	470 (7.34%)
Censored on: Use of other antidiabetic medication/metformin discontinuation/nursing home admission	2,768 (24.23%)	1,235 (19.29%)

- Report overall risk of the primary outcome.

	Glimepiride vs Sitagliptin
Risk per 1,000 patients	256.44

8. Initial Power Assessment

Aetion report name:

Optum CDM, Glimepiride vs Sitagliptin:

Induction window cohort analysis: <https://bwh-dope.aetion.com/projects/details/1734/rwrs/71827>

Outcome period (analytic cohort) analysis: <https://bwh-dope.aetion.com/projects/details/1734/rwrs/70813>

Date conducted: 06/23/2021 and 06/01/2021

In order to complete the initial power analysis, a dummy outcome will be used. This outcome is used to ensure that no information on the comparative risks of the outcomes of interest are available at this stage. A 1:1 PS-matched comparative analysis was performed, and PS should include only 3 covariates: age, gender and combined comorbidity index. Power calculations are based on the formulas from Chow et al. (2008).

- Stop analyses until feasibility and power are reviewed by primary investigators and FDA. Reviewers evaluate the results of the analyses described above in Sections 7 and 8, including numbers of patients, patient characteristics, follow-up time, and reasons for censoring by treatment group, as well as overall rates of outcomes and study power. These parameters are re-evaluated and reported in the subsequent sections, after incorporating feedback and refining the protocol.

- Glimepiride vs Sitagliptin

Superiority Analysis	
Number of patients matched	4,018
Reference	2,009
Exposed	2,009
Risk per 1,000 patients	256.44
Desired HR from RCT	0.75
Alpha (2-sided)	0.05
Number of events expected	1030.37592
Power	0.996061031

Stop analyses until feasibility and power are reviewed by primary investigators, FDA, and assigned members of advisory board.

Reviewed by PI:	Shirley Wang	Date reviewed:	6/1/2021
Reviewed by FDA:	Ken Quinto	Date reviewed:	6/4/2021
Reasons for stopping analysis (if required):			

9. Balance Assessment

Analysis was conducted in STATA after downloading the full and analytic cohort from Aetion.

Date conducted:

After review of initial feasibility and power analyses, complete creation of the remaining covariates from Section 6.2. Again, using the dummy outcome, complete a 1:1 PS-matched analysis. The PS should include the complete list of covariates.

- Provide plot of PS distributions stratified by treatment group.

Note- Please refer to AppendixB_Table1_GRADE_v1 (worksheet named 'PS matching').

- Report covariate balance after matching.

Note- Please refer to AppendixB_Table1_GRADE_v1 (worksheet named 'Table 1').

- Report reasons for censoring by treatment group (Glimepiride vs Sitagliptin)

	Overall	Referent	Exposure
Death	20 (0.51%)	9 (0.46%)	11 (0.56%)
Start of an additional exposure	90 (2.28%)	50 (2.53%)	40 (2.03%)
End of index exposure	1,451 (36.75%)	748 (37.89%)	703 (35.61%)
Maximum follow-up time (765 days)	513 (12.99%)	204 (10.33%)	309 (15.65%)
Specified date reached	477 (12.08%)	223 (11.3%)	254 (12.87%)
End of patient enrollment	318 (8.05%)	144 (7.29%)	174 (8.81%)
Censored on: Use of other antidiabetic medication/metformin discontinuation/nursing home admission	1,079 (27.33%)	596 (30.19%)	483 (24.47%)

- Report follow-up time by treatment group

Patient Group	Glimepiride vs Sitagliptin
Overall Patient Population	235 [162, 392]
Referent	227 [161, 362]
Exposure	241 [163, 426]

10. Final Power Assessment

Date conducted:

Re-calculate power in the appropriate excel table, using the revised number of matched patients from the PS-match in Section 9. All other parameters in the table should be the same as in Section 8.

- Glimepiride vs Sitagliptin

Superiority Analysis	
Number of patients matched	3,948
Reference	1,974
Exposed	1,974
Risk per 1,000 patients	256.44
Desired HR from RCT	0.75
Alpha (2-sided)	0.05
Number of events expected	1012.42512
Power	0.99556287

- Stop analyses until balance and final power assessment are reviewed by primary investigators, FDA, and assigned members of advisory board.

Reviewed by PI:	Shirley Wang	Date reviewed:	6/15/2021
Reviewed by FDA:	Kenneth Quinto	Date reviewed:	6/15/2021
Reasons for stopping analysis (if required):			

11. Study Confidence and Concerns

Deadline for voting on study confidence and listing concerns:

Date votes and concerns are summarized:

- If final feasibility and power analyses are reviewed and approved, proceed to the remaining protocol steps.
- All study team and advisory board members that review this protocol should at this stage provide their level of confidence for the success of the RWD study in the [Google Form](#). This form also provides space for reviewers to list any concerns that they feel may contribute to a failure to replicate the findings of the RCT, including differences in study populations, poor measurement of study variables, or residual confounding. All responses will be kept confidential and individual-level results will only be shared with the individual respondent.
- After the deadline for voting has passed, provide the distribution of responses and summarize all concerns here.

12. Register study protocol on [clinicalTrials.gov](#)

Date conducted:

- Register the study on [clinicalTrials.gov](#) and upload this document.

13. References

Chow S, Shao J, Wang H. 2008. Sample Size Calculations in Clinical Research. 2nd Ed. Chapman & Hall/CRC Biostatistics Series. page 177

The Glycemia Reduction Approaches in Diabetes: A Comparative Effectiveness Study (GRADE Study) NCT01794143 Statistical Analysis Plan October 5, 2017. (2017, October 5). Clinicaltrials.Gov. https://clinicaltrials.gov/ProvidedDocs/43/NCT01794143/SAP_001.pdf

Lachin JM, Foulkes MA. Evaluation of sample size and power for analyses of survival with allowance for nonuniform patient entry, losses to follow-up, noncompliance, and stratification. *Biometrics*. 1986;42:507-519

Appendix A: Flowchart

#	GRADE trial	References/Rationale	Color coding
		Please see the following Google Drive for further details or any missing information: https://drive.google.com/open?id=1WDP518wvwrTfEzAdTcuKvYccn6b6-eV	Criteria
	Trial details	ICD-10 codes are not listed in this document because of excel cell size limitations and excessive number of ICD-10 codes. Full ICD-10 code lists will be available in the above Google Drive Folder (link above). ICD-9 to ICD-10 code conversions were completed using a SAS macro that implements forward/backward mapping based on the CMS ICD-9 to ICD-10 mapping: https://www.nber.org/data/icd9icd10-cm-and-ops-crosswalk-general-equivalence-mapping.html	Adequate mapping in claims
	EXPOSURES FROM trial	Design and rationale paper: Nathan DM, Buse JB, Kahn SE et al. Rationale and Design of the Glycemia Reduction Approaches in Diabetes: A Comparative Effectiveness Study (GRADE). Diabetes Care. 2013; 36(8): 2254-2261	Intermediate mapping in claims
	Arm	Intervention/treatment	Poor mapping or cannot be measured in claims
	Active Comparator: Sulfonylurea (glimepiride)	Drug: Sulfonylurea (glimepiride)	Can't be measured in claims but not important for the analysis
	Active Comparator: DPP-4 inhibitor	Drug: DPP-4 inhibitor (sitagliptin)	
	Active Comparator: GLP-1 receptor agonist	Drug: GLP-1 receptor agonist (liraglutide)	
	Active Comparator: Insulin (glargine)	Drug: Insulin (glargine)	
	EXPOSURES in claims data		
	Active Comparator: Sulfonylurea (glimepiride)	Entry date: Between Jan 25, 2010 and Sep 30, 2020. Implemented exposure: Glimepiride	
	Active Comparator: DPP-4 inhibitor (sitagliptin)	Implemented reference: Sitagliptin	
	GRADE trial definitions	Implementation in routine care	
	PRIMARY OUTCOME		
	The primary outcome is the time to primary metabolic failure of the randomly assigned treatment, which is defined as the time to an initial A1C $\geq 7\%$ (53 mmol/mol), subsequently confirmed at the next quarterly visit, while on assigned medications, according to the principles of intention-to-treat analysis.	Implemented as having 2 consecutive HbA1C values $\geq 7\%$ assessed 135 days after cohort entry date. Follow up time will be discretized into 90 day blocks	
	SECONDARY OUTCOME		
	1. Glycemic control measured as the mean HbA1c, the mean body weight and the rate per year of moderate (or more severe) hypoglycemia since randomization over time, such as up to 4 years of follow-up. We will compute a mean HbA1c value and mean weight for each participant, and an overall rate of hypoglycemia events, i.e., one value each per subject. 2. The time to either an episode of severe hypoglycemia or the time of the primary outcome, whichever occurs first.	1. Mean HbA1C value measured approximately 6 months after cohort entry (180 days +/- 45) 2. Hypoglycemia measured any time after 1 day after cohort entry date IP primary position or ED any position ICD-9 diagnosis: "251.0", "251.2", "962.3", "251.1" ICD-10 diagnosis: "E11.641", "E11.649", "E13.641", "E15", "T38.3X1A", "T38.3X1D", "T38.3X2S", "T38.3X3A", "T38.3X4A", "T38.3X4D", "T38.3X5D", "E10.641", "E10.649", "E13.649", "E16.0", "E16.1", "E16.2", "T38.3X1S", "T38.3X2A", "T38.3X2D", "T38.3X3D", "T38.3X3S", "T38.3X4S", "T38.3X5A", "T38.3X5S"	
	INCLUSION CRITERIA		
1	Men or women ≥ 30 years of age at time of diabetes diagnosis; for American Indians, age is >20 years at time of diagnosis	Measured on the day of drug initiation Age ≥ 30 years	
2	Duration of diagnosed diabetes <10 years determined as accurately as possible based on available records at screening	[all available data, 0] any position, any care setting ICD-9 diagnosis: 250.x0 or 250.x2 ICD-10 diagnosis: E11.x	
3	HbA1c criteria (at final run-in visit, ~2 weeks prior to randomization): 6.8-8.5%	Implemented as having at least 2 HbA1c values between 2-20 within 365 days prior to and including cohort entry date, excluded if no value recorded, assessed 60 days prior to and including cohort entry date and not recorded HbA1c value between 6.8-8.5%, assessed 60 days prior to and including cohort entry date	
4	Taking a daily dose of >1000 mg metformin for a minimum of 8 weeks at final run-in	[-30, 0] Metformin only prescription within 30 days	
5	Willingness to administer daily subcutaneous injections, take a second diabetes drug after randomization, potentially initiate insulin and intensify insulin therapy if study metabolic goals are not met, and perform self-monitoring of blood glucose	N/A	
6	Fluent in either English or Spanish	N/A	
7	A negative pregnancy test for all females of childbearing potential (i.e. pre-menopausal, and not surgically sterile)	Apply this in exclusion #9 (see below)	
8	Provision of signed and dated informed consent prior to any study procedures	N/A	
	EXCLUSION CRITERIA		
1	Suspected type 1 diabetes (lean with polyuria, polydipsia, and weight loss with little response to metformin) or secondary diabetes due to specific causes (e.g. previously diagnosed monogenic syndromes, pancreatic surgery, pancreatitis)	[all available data, 0] any position, any care setting Diabetes Mellitus Type 1 ICD-9 diagnosis: 250.x1 or 250.x3 ICD-10 diagnosis: E10.x Secondary Diabetes Mellitus ICD-9 diagnosis: 249.xx ICD-10 diagnosis: E08.*, E09.*	
2	Current or previous (within past 6 months) treatment with any diabetes drug/glucoselowering medication other than metformin	[-180, 0] Exclude any antidiabetic medication (other than metformin) in prior 6-months.	
3	More than 10 years of treatment with metformin at time of randomization	[-3650, 0] Exclude if metformin therapy on each day (with 60-day gap allowed) for continuous 10 years prior to index date	
4	History of intolerance or allergy or other contraindications to any of the proposed study medications	N/A	

Appendix A: Flowchart

5	Current need for any specific glucose-lowering medications solely for other conditions, for example for polycystic ovary syndrome	<p>[-180, 0] any position, any care setting</p> <p><u>PCOS</u> ICD-9 diagnosis: 256.4 ICD-10 diagnosis: E28.2</p>	
6	Symptomatic hyperglycemia requiring immediate therapy during screening or run-in, in the judgment of the physician	<p>[-180, 0] inpatient primary position or ED any position, any care setting</p> <p>ICD-9 diagnosis: 790.29 ICD-10 diagnosis: "R73.9", "R73.09", "E09.65", "E10.65", "E13.65", "E08.65", "E11.65"</p>	
7	A life-threatening event within 30 days prior to screening or currently planned major surgery	<p>[-365, 0] any position, inpatient care setting</p> <p>Hospitalization with Length of stay > 3days (in prior 30 days)</p>	
8	Any major cardiovascular event in previous year, including history of myocardial infarction, stroke, or vascular procedure such as coronary artery or peripheral bypass grafting, stent placements (peripheral or coronary) or angioplasty.	<p>[-365, 0] any position, inpatient care setting</p> <p><u>MI (Acute and Old)</u> ICD-9 diagnosis: 410.xx, 412</p> <p><u>Any Stroke</u> ICD-9 diagnosis: 430.xx Subarachnoid hemorrhage (SAH) 431.xx Intracerebral hemorrhage (ICH) 433.x1 Occlusion and stenosis of precerebral arteries with cerebral infarction 434.x1 Occlusion and stenosis of cerebral arteries with cerebral infarction 436.x Acute, but ill-defined cerebrovascular events.</p> <p><u>Ischemic stroke</u> ICD-9 diagnosis: 433.xx, 434.xx, 436.xx</p> <p><u>Hemorrhagic Stroke</u> ICD-9 diagnosis: 430.xx, 431.xx</p> <p><u>Coronary revascularization- PTCA/CARG/Stent</u> ICD-9 diagnosis: V45.81, V45.82</p> <p><u>PTCA</u> CPT-4: 92973, 92982, 92984, 92995, 92996, 92920 - 92921, 92924 - 92925, 92937, 92938, 92941, 92943, 92944 ICD-9 procedure: 00.66, 36.01, 36.02, 36.03, 36.05, 36.09</p> <p><u>Stenting</u> CPT-4: 92980, 92981, 92928 - 92929, 92933 - 92934 ICD-9 procedure: 36.06, 36.07</p>	
9	Plans for pregnancy during the course of the study for women of child-bearing potential	<p>[-180, 0] any position, any care setting</p> <p>ICD-9 diagnosis: "362.2", "362.22", "362.23", "362.26", "644.20", "645", "645.1", "645.10", "645.11", "645.13", "645.20", "645.23", "651.01", "651.11", "651.2", "651.23", "651.30", "651.31", "651.4", "651.40", "651.43", "651.61", "651.63", "651.70", "651.71", "651.81", "651.9", "651.90", "651.91", "651.93", "652.6", "652.60", "652.61", "652.63", "660.5", "660.51", "660.53", "662.30", "761.5", "765.00", "765.01", "765.03", "765.05", "765.11", "765.14", "765.16", "765.22", "765.25", "765.26", "765.28", "766.2", "776.6", "V22", "V22.0", "V23", "V23.2", "V23.3", "V23.42", "V23.49", "V23.5", "V23.7", "V23.81", "V23.84", "V27.5", "V27.6", "V31.00", "V32.0", "V32.00", "V32.1", "V33", "V33.0", "V33.00", "V33.01", "V34", "V34.0", "V34.1", "V35.0", "V35.00", "V35.01", "V35.1", "V35.2", "V36.0", "V36.01", "V36.2", "V37.0", "V37.00", "V37.2", "362.24", 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Appendix A: Flowchart

11	History of congestive heart failure (NYHA 3 or greater)	<p>[all available data, 0] any position, inpatient care setting</p> <p>ICD-9 diagnosis: 428.xx, 398.91, 402.x1, 404.x1, 404.x3 ICD-10 diagnosis: I09.81, I11.0, I13.0, I13.2, I50.xxx, I97.13x</p>	
12	History of pancreatitis	<p>[all available data, 0] any position, any care setting</p> <p>ICD-9 diagnosis: 577.0, 577.1 ICD-10 diagnosis: "K85.02", "K85.10", "K85.11", "K85.12", "K85.20", "K85.21", "K85.22", "K85.30", "K85.31", "K85.80", "K85.00", "K85.01", "K85.32", "K85.81", "K85.82", "K85.90", "K85.91", "K85.92", "K86.1", "K86.0"</p>	
13	History of MEN-2 or family history of medullary thyroid cancer	<p>[all available data, 0] any position, any care setting</p> <p>ICD-9 diagnosis: 258.01, 258.02, 258.03 ICD-10 diagnosis: E31.20, E31.21, E31.22, E31.23</p>	
14	Serum creatinine >1.4 mg/dl in women and >1.5 mg/dl in men or end stage renal disease requiring renal replacement therapy	<p>[180, 0] any position, any care setting</p> <p>ICD-9 diagnosis: "996.81", "942.0", "V45.11", "V56", "V56.0", "V56.3", "V56.8", "585.5", "585.6", "V45.1", "V45.12", "V56.1", "V56.2", "V56.31", "V56.32"</p> <p>ICD-10 diagnosis: "N18.6", "T82.41", "T82.41XA", "T82.41XD", "T82.42", "T82.42XA", "T82.42XD", "T82.49X", "T82.49XD", "T86.12", "Y84.1", "Z49", "Z49.01", "Z49.02", "Z49.3", "Z49.31", "Z49.32", "N18.5", "R88.0", "T82.41XS", "T82.42XS", "T82.49", "T82.49XA", "T82.49XS", "T85.611", "T85.611A", "T85.611D", "T85.611S", "T85.621", "T85.631", "T86.1", "T86.10", "T86.11", "T86.13", "T86.19", "Z48.22", "Z49.0", "Z91.15", "Z94.0", "Z99.2"</p> <p>ICD-9 procedure: "39.95", "55.6", "55.69", "54.98", "55.61" ICD10 Px codes: "0TY002Z", "0TY10Z0", "0TY10Z1", "0TY10Z2", "5A1D00Z", "5A1D70Z", "5A1D80Z", "5A1D90Z", "0TY0020", "0TY0021", "3E1M39Z", "5A1D60Z"</p> <p>CPT/HCPCS: "50365", "90924", "90925", "90937", "90945", "90958", "90959", "90960", "90970", "90989", "90993", "90997", "90999", "99512", "99559", "G0314", "G0316", "G0317", "G0322", "G0327", "S9335", "S9339", "50360", "90920", "90921", "90935", "90939", "90940", "90947", "90957", "90961", "90962", "90965", "90966", "90969", "G0257", "G0315", "G0318", "G0319", "G0323", "G0326"</p>	
15	History of cancer, other than non-melanoma skin cancer, that required therapy in the 5 years prior to randomization	<p>[1825, 0] any position, any care setting</p> <p>ICD-9 diagnosis: 140.x-209.x (except 173.x, non-melanoma skin cancer and 209.4x, 209.5x, 209.6x) ICD-10 diagnosis: C00.x-C96, D45 (except C44.x, non-melanoma skin cancer)</p>	
16	History of severe liver disease or ALT > 3 times upper limit of normal	<p>[180, 0] any position, any care setting</p> <p><u>Cirrhosis:</u> ICD-9 diagnosis: 571.2, 571.5, 571.6 ICD-10 diagnosis: K70.11, K70.2, K70.3x, K70.4x, K74.x</p> <p><u>Hepatic decompensation:</u> ICD-9 diagnosis: 456.0, 456.20, 456.1, 456.21, 789.5, 789.59, 572.2, 567.0, 567.2, 567.21, 567.22, 567.29, 567.8, 567.89, 567.9, 572.4 ICD-10 diagnosis: R18.x, I85.x, K72.x, K65.x, K66.x, K67</p> <p>HCC is excluded with exclusion criteria 15</p>	
17	Current alcoholism or excessive alcohol intake	<p>[180, 0] any position, any care setting</p> <p>ICD-9 diagnosis: "291", "291.2", "291.3", "291.5", "291.81", "303.01", "303.02", "303.9", "303.90", "303.93", "305.0", "425.5", "571.0", "571.2", "E860.0", "V11.3", "291.0", "291.1", "291.4", "291.8", "291.82", "291.89", "291.9", "303", "303.0", "303.00", "303.03", "303.91", "303.92", "305.00", "305.01", "305.02", "305.03", "357.5", "571.1", "571.3"</p> <p>ICD-10 diagnosis: "F10.1", "F10.12", "F10.181", "F10.182", "F10.188", "F10.21", "F10.220", "F10.23", "F10.231", "F10.232", "F10.239", "F10.24", "F10.25", "F10.250", "F10.280", "F10.281", "F10.282", "F10.288", "F10.9", "F10.92", "F10.920", "F10.921", "F10.950", "F10.96", "F10.98", "F10.982", "F10.988", "F10.99", "K70.10", "K70.2", "K70.3", "K70.31", "K70.41", "K70.9", "T51.0X1", "T51.0X1D", "F10", "F10.10", "F10.11", "F10.120", "F10.121", "F10.129", "F10.14", "F10.15", "F10.150", "F10.151", "F10.159", "F10.18", "F10.180", "F10.19", "F10.2", "F10.20", "F10.22", "F10.221", "F10.229", "F10.230", "F10.251", "F10.259", "F10.26", "F10.27", "F10.28", "F10.29", "F10.929", "F10.94", "F10.95", "F10.951", "F10.959", "F10.97", "F10.980", "F10.981", "K70", "K70.0", "K70.1", "K70.11", "K70.30", "K70.4", "K70.40", "T51.0X1A", "T51.0X15"</p>	

Appendix A: Flowchart

18	Previous organ transplant	<p>[all available data, 0] any position, any care setting</p> <p>ICD-9 diagnosis: "996.80", "996.81", "996.83", "996.84", "996.86", "996.87", "996.89", "E878.0", "V42.0", "V42.8", "V42.83", "V42.84", "V42.89", "V42.9", "V58.44", "996.82", "V42.1", "V42.6", "V42.7"</p> <p>ICD10 Dx codes: "T86.12", "T86.2", "T86.21", "T86.29", "T86.290", "T86.4", "T86.40", "T86.43", "T86.81", "T86.810", "T86.812", "T86.85", "T86.851", "T86.858", "T86.859", "T86.89", "T86.892", "T86.898", "Y83.0", "Z48.21", "Z48.23", "Z48.24", "Z48.28", "Z48.280", "Z48.29", "Z48.298", "Z94.1", "Z94.2", "Z94.4", "Z94.82", "Z94.83", "Z94.89", "T86.1", "T86.10", "T86.11", "T86.13", "T86.19", "T86.20", "T86.22", "T86.23", "T86.298", "T86.3", "T86.30", "T86.31", "T86.32", "T86.33", "T86.39", "T86.41", "T86.42", "T86.49", "T86.811", "T86.818", "T86.819", "T86.850", "T86.852", "T86.890", "T86.891", "T86.899", "Z48.2", "Z48.22", "Z48.288", "Z94.0", "Z94.3", "Z94.9"</p> <p>ICD-9 procedure: "33.50", "33.51", "33.6", "37.51", "46.97", "52.80", "52.81", "52.86", "55.6", "55.69", "33.5", "33.52", "50.5", "50.51", "50.59", "52.8", "52.82", "52.83", "52.84", "52.85", "55.61"</p> <p>ICD10 Px codes: "O2YA021", "O2YA022", "OBYC022", "OBYD020", "OBYG022", "OBYH021", "OBYH022", "OBYI021", "OBYI022", "OBYK021", "OBYK022", "OBYL020", "OBYM022", "ODY5022", "ODY6022", "ODY8021", "ODYE020", "OFY0020", "OFY0021", "OFYG020", "OFYG021", "OFYG022", "OTY0022", "OTY1020", "OTY1021", "OTY1022", "3E030U0", "3E033U0", "3E033U1", "3E0J7U1", "OBYC020", "OBYC021", "OBYD021", "OBYD022", "OBYF020", "OBYF021", "OBYF022", "OBYG020", "OBYG021", "OBYH020", "OBYH021", "OBYK020", "OBYL021", "OBYL022", "OBYM020", "OBYM021", "ODY5020", "ODY5021", "ODY6020", "ODY6021", "ODY8020", "ODY8021", "ODYE022", "OFSG022", "OFSG422", "OFY0022", "OTY0021", "OTY0022", "3E030U1", "3E033U0", "3E033U1", "3E0J7U0", "3E0J8U0", "3E0J8U1"</p> <p>HCPCS/CPT: "32851", "32852", "32853", "32854", "33935", "33945", "44135", "44136", "47135", "47136", "48554", "48556", "50360", "50365", "50370", "50380"</p>	
19	Treatment with oral or systemic glucocorticoids (other than short-term treatment, for example for poison ivy, Addison disease) or disease likely to require periodic or regular glucocorticoid therapy (inhaled steroids are allowed)	<p>[90, 0] any position, any care setting</p> <p>CPT/HCPCS Procedure Code: J1020, J1030, J1040, J1720, J2920, J2930</p> <p>Generic Name with route of administration oral, IV, IM Cortisone, hydrocortisone, prednisone, prednisolone, methylprednisolone, dexamethasone</p>	
20	Treatment with atypical antipsychotics	<p>[180, 0]</p> <p>Chlorpromazine, chlorprothixene, fluphenazine, haloperidol, loxapine, mesoridazine, molindone, perphenazine, perphenazine/amitriptyline, pimozide, promazine, propiomazine, thioridazine, thiothixene, trifluoperazine, triflupromazine</p>	
21	History of hemolytic anemia, chronic transfusion requirement, or other condition rendering HbA1c results unreliable as indicator of chronic glucose levels, or hematocrit <35 for males and <33 for females	<p>[180, 0] any position, any care setting</p> <p>ICD-9 diagnosis: 282*, 283*</p> <p>ICD-10 diagnosis: "D55", "D55.0", "D55.1", "D55.9", "D56.1", "D56.2", "D56.3", "D56.8", "D56.9", "D57", "D57.0", "D57.01", "D57.1", "D57.2", "D57.21", "D57.212", "D57.40", "D57.419", "D57.81", "D57.811", "D57.819", "D58.0", "D58.8", "D59.0", "D59.1", "D59.4", "D59.8", "D55.2", "D55.3", "D55.8", "D56", "D56.0", "D56.4", "D56.5", "D57.00", "D57.02", "D57.20", "D57.211", "D57.219", "D57.3", "D57.4", "D57.41", "D57.411", "D57.412", "D57.8", "D57.80", "D57.812", "D58.1", "D58.2", "D58.9", "D59.2", "D59.5", "D59.6", "D59.9"</p>	
22	Clinically or medically unstable with expected survival <1 year	CCI >= 10	
23	Unwillingness to permit sites to contact the PCP to communicate information about the study and the participant's data		
24	No non-study PCP or inability to identify such a PCP (who will provide non-study care) by the time of final run-in		
25	Participation in another interventional clinical trial	N/A	
26	Previous randomization in the GRADE study		
27	In the opinion of the principal investigator (PI), any other factor, including language barrier, likely to limit compliance with the protocol	<p>[180, 0] any position, any care setting</p> <p>ICD-9 diagnosis: "V15.81", "V45.12"</p> <p>ICD-10 diagnosis: "Z91.11", "Z91.120", "Z91.128", "Z91.130", "Z91.138", "Z91.14", "Z91.15", "Z91.19"</p>	
28	Gestational DM	<p>[180, 0] any position, any care setting</p> <p>ICD-9 diagnosis: 648.8x ICD-10 diagnosis: O24.4xx, O99.81x</p>	
29	HIV/AIDS	<p>[all available, 0] any position, any care setting</p> <p>ICD-9 diagnosis: "V08", "O42", "O79.53"</p> <p>ICD-10 diagnosis: "B97.35", "Z21", "B20"</p> <p>AntiHIV medications; Codes are in "HIV/AIDS" sheet</p>	
30	Nursing home	<p>[180, 0]</p> <p>Inpatient claims where Discharge Status Code is any of: 03 = DISCHARGED/TRANSFERRED TO SKILLED NURSING FACILITY (SNF) WITH MEDICARE 64 = DISCHARGED/TRANSFERRED TO A NURSING FACILITY CERT UND MEDICARE</p> <p>HCPCS codes: "99302", "99303", "99311", "99312", "99313", "99301", "99315", "99316", "99379", "99380", "G0066"</p> <p>Place of service codes from Medical service file: 31-34</p>	
31	Age Gender	<p>[180, 0]</p> <p>If missing</p>	

Appendix A: Attrition Table

OPTUM

Glime vs Sita, Aetion link: <https://bwh-dope.aetion.com/cohorts/details/24148/1734/70632/basics>

Glimepiride vs Sitagliptin	Less Excluded Patients
All patients	
Did not meet cohort entry criteria [Liraglutide vs Sitagliptin] Between Jan 25, 2010 and Sep 30, 2020, Cohort entry date (CED, 0)	
Excluded due to insufficient enrollment 180 days with 30 days gap allowed	-138,451 (13%)
Excluded due to prior use of exposure 180 days wash out	-351,601 (39%)
Excluded due to prior use of reference 180 days wash out	-413,553 (76%)
Excluded because patient qualified in >1 exposure category	-531 (<1%)
Excluded based on Inclusion 1- Age >=30 on CED	-975 (<1%)
Excluded based on Inclusion 2- DM Type 2 [-730, 0]	-3,336 (3%)
Excluded based on Inclusion 3a: Lab value HbA1c (< 6.7) [based on last recorded value, -60, 0]	-4,876 (4%)
Excluded based on Inclusion 3b: Lab value HbA1c (> 8.5) [based on last recorded value, -60, 0]	-10,255 (9%)
Excluded based on Inclusion 3c: Lab value HbA1c [less than 2 counts within 365 days]	-79,879 (73%)
Excluded based on Inclusion 3b: Lab value HbA1c [no value recorded, -60, 0]	-10,406 (36%)
Excluded based on Inclusion 4: Metformin only [-30, 0]	-3,917 (21%)
Excluded based on Exclusion 1a: Type 1 DM [-730, 0]	-743 (5%)
Excluded based on Exclusion 1b: Secondary DM [-730, 0]	-189 (1%)
Excluded based on Exclusion 2: Gestational DM [-180, 0]	0 (<1%)
Excluded based on Exclusion 3a: Antidiabetic agents except metformin [-180, 0]	-1,694 (12%)
Excluded based on Exclusion 3b: Antidiabetic agents except metformin on CED	0 (<1%)
Excluded based on Exclusion 4: Metformin more than 10 years (60 day gap allowed) [-3650, 0]	-3 (<1%)
Excluded based on Exclusion 5: Polycystic ovary syndrome [-180, 0]	-6 (<1%)
Excluded based on Exclusion 6: Symptomatic hyperglycemia [-180, 0]	-20 (<1%)
Excluded based on Exclusion 7: Any hospitalization more than 3 days within 30 days prior	-37 (<1%)
Excluded based on Exclusion 8: Any major cardiovascular event in previous year [-365, 0]	-22 (<1%)
Excluded based on Exclusion 9: Pregnancy [-180, 0]	-1 (<1%)
Excluded based on Exclusion 10: Bariatric surgery [-730, 0]	-9 (<1%)
Excluded based on Exclusion 11: Heart failure NHYA 3 or greater [-730, 0]	-54 (<1%)
Excluded based on Exclusion 12: History of pancreatitis [-730, 0]	-31 (<1%)
Excluded based on Exclusion 13: History of MEN-2 [-730, 0]	0 (<1%)
Excluded based on Exclusion 14: ESRD [-180, 0]	-2 (<1%)
Excluded based on Exclusion 15: Cancer [-1825, 0]	-250 (2%)
Excluded based on Exclusion 16: Liver disease [-180, 0]	-17 (<1%)
Excluded based on Exclusion 17: Alcohol abuse or dependence [-180, 0]	-14 (<1%)
Excluded based on Exclusion 18: Organ Transplant [all available data, 0]	-1 (<1%)
Excluded based on Exclusion 19: Use of oral or systemic glucocorticoids [-90, 0]	-157 (1%)
Excluded based on Exclusion 20: Atypical antipsychotics [-180, 0]	-2 (<1%)
Excluded based on Exclusion 21: Hemolytic anemia [-180, 0]	-3 (<1%)
Excluded based on Exclusion 22: CCI score >=10	0 (<1%)
Excluded based on Exclusion 23: Non-compliance [-180, 0]	-15 (<1%)
Excluded based on Exclusion 24: HIV/AIDS [all available data, 0]	-5 (<1%)
Excluded based on Exclusion 25: Nursing home [-180, 0]	-5 (<1%)
Excluded based on Exclusion 26a: Age Missing	0 (<1%)
Excluded based on Exclusion 26b: Gender Missing	0 (<1%)
Final cohort	

Appendix A: Trial Information

Information from Trial

Trial Name: GRADE

<https://clinicaltrials.gov/ct2/show/NCT01794143>

NCT: NCT01794143

Therapeutic Area: Diabetes

RCT Category:

Sponsors and Collaborators:

GRADE Study Group

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

National Heart, Lung, and Blood Institute (NHLBI)

Becton, Dickinson and Company

Bristol-Myers Squibb

Merck Sharp & Dohme Corp.

Novo Nordisk A/S

Roche Diagnostics

Sanofi

Year: May 2013 - July 2021

Measurable Endpoint: The primary metabolic outcome is the time to primary failure defined as an HbA1c \geq 7% (53mmol/mol), subsequently confirmed.

Active Comparators:

Sitagliptin

Glimepiride

Liraglutide

Insulin (glargine)

Population: Adult \geq 30years with duration of diagnosed diabetes < 10 years and on Metformin treatment only

No. of Patients: 5047

Power: 90%

Appendix A: Codes

Exclusion: Peripheral vascular disease	170.722	Atherosclerosis of other type of bypass grafts) of the extremities with rest pain, left leg
Exclusion: Peripheral vascular disease	170.723	Atherosclerosis of other type of bypass grafts) of the extremities with rest pain, bilateral legs
Exclusion: Peripheral vascular disease	170.728	Atherosclerosis of other type of bypass grafts) of the extremities with rest pain, other extremity
Exclusion: Peripheral vascular disease	170.729	Atherosclerosis of other type of bypass grafts) of the extremities with rest pain, unspecified extremity
Exclusion: Peripheral vascular disease	170.731	Atherosclerosis of other type of bypass grafts) of the right leg with ulceration of thigh
Exclusion: Peripheral vascular disease	170.732	Atherosclerosis of other type of bypass grafts) of the right leg with ulceration of calf
Exclusion: Peripheral vascular disease	170.733	Atherosclerosis of other type of bypass grafts) of the right leg with ulceration of ankle
Exclusion: Peripheral vascular disease	170.734	Atherosclerosis of other type of bypass grafts) of the right leg with ulceration of heel and midfoot
Exclusion: Peripheral vascular disease	170.735	Atherosclerosis of other type of bypass grafts) of the right leg with ulceration of other part of foot
Exclusion: Peripheral vascular disease	170.738	Atherosclerosis of other type of bypass grafts) of the right leg with ulceration of other part of lower leg
Exclusion: Peripheral vascular disease	170.739	Atherosclerosis of other type of bypass grafts) of the right leg with ulceration of unspecified site
Exclusion: Peripheral vascular disease	170.741	Atherosclerosis of other type of bypass grafts) of the left leg with ulceration of thigh
Exclusion: Peripheral vascular disease	170.742	Atherosclerosis of other type of bypass grafts) of the left leg with ulceration of calf
Exclusion: Peripheral vascular disease	170.743	Atherosclerosis of other type of bypass grafts) of the left leg with ulceration of ankle
Exclusion: Peripheral vascular disease	170.744	Atherosclerosis of other type of bypass grafts) of the left leg with ulceration of heel and midfoot
Exclusion: Peripheral vascular disease	170.745	Atherosclerosis of other type of bypass grafts) of the left leg with ulceration of other part of foot
Exclusion: Peripheral vascular disease	170.748	Atherosclerosis of other type of bypass grafts) of the left leg with ulceration of other part of lower leg
Exclusion: Peripheral vascular disease	170.749	Atherosclerosis of other type of bypass grafts) of the left leg with ulceration of unspecified site
Exclusion: Peripheral vascular disease	170.75	Atherosclerosis of other type of bypass grafts) of other extremity with ulceration
Exclusion: Peripheral vascular disease	170.761	Atherosclerosis of other type of bypass grafts) of the extremities with gangrene, right leg
Exclusion: Peripheral vascular disease	170.762	Atherosclerosis of other type of bypass grafts) of the extremities with gangrene, left leg
Exclusion: Peripheral vascular disease	170.763	Atherosclerosis of other type of bypass grafts) of the extremities with gangrene, bilateral legs
Exclusion: Peripheral vascular disease	170.768	Atherosclerosis of other type of bypass grafts) of the extremities with gangrene, other extremity
Exclusion: Peripheral vascular disease	170.769	Atherosclerosis of other type of bypass grafts) of the extremities with gangrene, unspecified extremity
Exclusion: Peripheral vascular disease	170.791	Other atherosclerosis of other type of bypass grafts) of the extremities, right leg
Exclusion: Peripheral vascular disease	170.792	Other atherosclerosis of other type of bypass grafts) of the extremities, left leg
Exclusion: Peripheral vascular disease	170.793	Other atherosclerosis of other type of bypass grafts) of the extremities, bilateral legs
Exclusion: Peripheral vascular disease	170.798	Other atherosclerosis of other type of bypass grafts) of the extremities, other extremity
Exclusion: Peripheral vascular disease	170.799	Other atherosclerosis of other type of bypass grafts) of the extremities, unspecified extremity
Exclusion: Peripheral vascular disease	170.92	Chronic total occlusion of artery of the extremities
Exclusion: Peripheral vascular disease	173.9	Peripheral vascular disease, unspecified
Exclusion: Peripheral vascular disease	35256	Repair blood vessel with vein graft; lower extremity
Exclusion: Peripheral vascular disease	35286	Repair blood vessel with graft other than vein; lower extremity
Exclusion: Peripheral vascular disease	35351	Thromboendarterectomy, including patch graft, if performed; iliac / Thromboendarterectomy, with or without patch graft; iliac
Exclusion: Peripheral vascular disease	35355	Thromboendarterectomy, including patch graft, if performed; iliofemoral / Thromboendarterectomy, with or without patch graft; iliofemoral
Exclusion: Peripheral vascular disease	35361	Thromboendarterectomy, including patch graft, if performed; combined aortiliac / Thromboendarterectomy, with or without patch graft; combined aortiliac
Exclusion: Peripheral vascular disease	35363	Thromboendarterectomy, including patch graft, if performed; combined aortiliofemoral / Thromboendarterectomy, with or without patch graft; combined aortiliofemoral
Exclusion: Peripheral vascular disease	35371	Thromboendarterectomy, including patch graft, if performed; common femoral / Thromboendarterectomy, with or without patch graft; common femoral
Exclusion: Peripheral vascular disease	35372	Thromboendarterectomy, including patch graft, if performed; deep
Exclusion: Peripheral vascular disease	35381	Thromboendarterectomy, with or without patch graft; femoral and/or popliteal, and/or tibioperoneal
Exclusion: Peripheral vascular disease	35454	Transluminal balloon angioplasty, open; iliac
Exclusion: Peripheral vascular disease	35456	Transluminal balloon angioplasty, open; femoralpopliteal
Exclusion: Peripheral vascular disease	35459	Transluminal balloon angioplasty, open; tibioperoneal trunk and branches
Exclusion: Peripheral vascular disease	35470	Transluminal balloon angioplasty, percutaneous; tibioperoneal trunk or branches, each vessel
Exclusion: Peripheral vascular disease	35473	Transluminal balloon angioplasty, percutaneous; iliac
Exclusion: Peripheral vascular disease	35474	Transluminal balloon angioplasty, percutaneous; femoralpopliteal
Exclusion: Peripheral vascular disease	35482	Transluminal peripheral atherectomy, open; iliac
Exclusion: Peripheral vascular disease	35483	Transluminal peripheral atherectomy, open; femoralpopliteal
Exclusion: Peripheral vascular disease	35485	Transluminal peripheral atherectomy, open; tibioperoneal trunk and branches
Exclusion: Peripheral vascular disease	35492	Transluminal peripheral atherectomy, percutaneous; iliac
Exclusion: Peripheral vascular disease	35493	Transluminal peripheral atherectomy, percutaneous; femoralpopliteal
Exclusion: Peripheral vascular disease	35495	Transluminal peripheral atherectomy, percutaneous; tibioperoneal trunk and branches
Exclusion: Peripheral vascular disease	35521	Bypass graft, with vein; axillaryfemoral
Exclusion: Peripheral vascular disease	35533	Bypass graft, with vein; axillaryfemoralfemoral
Exclusion: Peripheral vascular disease	35541	Bypass graft, with vein; aortiliac or biliac
Exclusion: Peripheral vascular disease	35546	Bypass graft, with vein; aortofemoral or bifemoral
Exclusion: Peripheral vascular disease	35548	Bypass graft, with vein; aortiliofemoral, unilateral
Exclusion: Peripheral vascular disease	35549	Bypass graft, with vein; aortiliofemoral, bilateral
Exclusion: Peripheral vascular disease	35551	Bypass graft, with vein; aortofemoralpopliteal
Exclusion: Peripheral vascular disease	35556	Bypass graft, with vein; femoralpopliteal
Exclusion: Peripheral vascular disease	35558	Bypass graft, with vein; femoralfemoral
Exclusion: Peripheral vascular disease	35563	Bypass graft, with vein; ilioiliac
Exclusion: Peripheral vascular disease	35565	Bypass graft, with vein; iliofemoral
Exclusion: Peripheral vascular disease	35566	Bypass graft, with vein; femoralanterior tibial, posterior tibial, peroneal artery or other distal vessels
Exclusion: Peripheral vascular disease	35570	Bypass graft, with vein; tibialtibial, peronealtibial, or tibial/peroneal trunk
Exclusion: Peripheral vascular disease	35571	Bypass graft, with vein; poplitealtibial, peroneal artery or other distal vessels
Exclusion: Peripheral vascular disease	35582	Insitu vein bypass; aortofemoralpopliteal
Exclusion: Peripheral vascular disease	35583	Insitu vein bypass; femoralpopliteal
Exclusion: Peripheral vascular disease	35585	Insitu vein bypass; femoralanterior tibial, posterior tibial, or peroneal artery
Exclusion: Peripheral vascular disease	35587	Insitu vein bypass; poplitealtibial, peroneal
Exclusion: Peripheral vascular disease	35621	Bypass graft, with other than vein; axillaryfemoral
Exclusion: Peripheral vascular disease	35623	Bypass graft, with other than vein; axillarypopliteal or tibial
Exclusion: Peripheral vascular disease	35637	Bypass graft, with other than vein; aortiliac
Exclusion: Peripheral vascular disease	35638	Bypass graft, with other than vein; aortilioiliac
Exclusion: Peripheral vascular disease	35641	Bypass graft, with other than vein; aortiliac or biliac
Exclusion: Peripheral vascular disease	35646	Bypass graft, with other than vein; aortibifemoral / Bypass graft, with other than vein; aortofemoral or bifemoral
Exclusion: Peripheral vascular disease	35647	Bypass graft, with other than vein; aortofemoral
Exclusion: Peripheral vascular disease	35651	Bypass graft, with other than vein; aortofemoralpopliteal
Exclusion: Peripheral vascular disease	35654	Bypass graft, with other than vein; axillaryfemoralfemoral
Exclusion: Peripheral vascular disease	35656	Bypass graft, with other than vein; femoralpopliteal
Exclusion: Peripheral vascular disease	35661	Bypass graft, with other than vein; femoralfemoral
Exclusion: Peripheral vascular disease	35663	Bypass graft, with other than vein; ilioiliac
Exclusion: Peripheral vascular disease	35666	Bypass graft, with other than vein; femoralanterior tibial, posterior tibial, or peroneal artery
Exclusion: Peripheral vascular disease	35671	Bypass graft, with other than vein; poplitealtibial or peroneal artery
Exclusion: Peripheral vascular disease	35681	Bypass graft; composite, prosthetic and vein
Exclusion: Peripheral vascular disease	35682	Bypass graft; autogenous composite, 2 segments of veins from 2 locations
Exclusion: Peripheral vascular disease	35683	Bypass graft; autogenous composite, 3 or more segments of vein from 2 or more locations
Exclusion: Peripheral vascular disease	35879	Revision, lower extremity arterial bypass, without thrombectomy, open; with vein patch angioplasty
Exclusion: Peripheral vascular disease	37207	Transcatheter placement of an intravascular stent
Exclusion: Peripheral vascular disease	37208	Transcatheter placement of an intravascular stent
Exclusion: Peripheral vascular disease	37220	Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal angioplasty
Exclusion: Peripheral vascular disease	37221	Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal stent placement
Exclusion: Peripheral vascular disease	37222	Revascularization, endovascular, open or percutaneous, iliac artery, each additional ipsilateral iliac vessel; with transluminal angioplasty
Exclusion: Peripheral vascular disease	37223	Revascularization, endovascular, open or percutaneous, iliac artery, each additional ipsilateral iliac vessel; with transluminal stent placement
Exclusion: Peripheral vascular disease	37224	Revascularization, endovascular, open or percutaneous, femoral, popliteal artery
Exclusion: Peripheral vascular disease	37225	Revascularization, endovascular, open or percutaneous, femoral, popliteal artery
Exclusion: Peripheral vascular disease	37226	Revascularization, endovascular, open or percutaneous, femoral, popliteal artery
Exclusion: Peripheral vascular disease	37227	Revascularization, endovascular, open or percutaneous, femoral, popliteal artery
Exclusion: Peripheral vascular disease	37228	Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal angioplasty
Exclusion: Peripheral vascular disease	37229	Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with atherectomy, includes angioplasty within the same vessel, when perfo
Exclusion: Peripheral vascular disease	37230	Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal stent placement
Exclusion: Peripheral vascular disease	37231	Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal stent placement
Exclusion: Peripheral vascular disease	37232	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with transluminal angioplasty
Exclusion: Peripheral vascular disease	37233	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with atherectomy, includes angioplasty within the same vessel, w
Exclusion: Peripheral vascular disease	37234	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with transluminal stent placement
Exclusion: Peripheral vascular disease	37235	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with transluminal stent placement

Appendix A: Codes

Variables	Codes	Description
Exclusion: Pregnancy	H35.101	Retinopathy of prematurity, unspecified, right eye
Exclusion: Pregnancy	H35.103	Retinopathy of prematurity, unspecified, bilateral
Exclusion: Pregnancy	H35.11	Retinopathy of prematurity, stage 0
Exclusion: Pregnancy	H35.111	Retinopathy of prematurity, stage 0, right eye
Exclusion: Pregnancy	H35.113	Retinopathy of prematurity, stage 0, bilateral
Exclusion: Pregnancy	H35.122	Retinopathy of prematurity, stage 1, left eye
Exclusion: Pregnancy	H35.123	Retinopathy of prematurity, stage 1, bilateral
Exclusion: Pregnancy	H35.13	Retinopathy of prematurity, stage 2
Exclusion: Pregnancy	H35.133	Retinopathy of prematurity, stage 2, bilateral
Exclusion: Pregnancy	H35.14	Retinopathy of prematurity, stage 3
Exclusion: Pregnancy	H35.141	Retinopathy of prematurity, stage 3, right eye
Exclusion: Pregnancy	H35.142	Retinopathy of prematurity, stage 3, left eye
Exclusion: Pregnancy	H35.15	Retinopathy of prematurity, stage 4
Exclusion: Pregnancy	H35.153	Retinopathy of prematurity, stage 4, bilateral
Exclusion: Pregnancy	H35.159	Retinopathy of prematurity, stage 4, unspecified eye
Exclusion: Pregnancy	H35.16	Retinopathy of prematurity, stage 5
Exclusion: Pregnancy	H35.161	Retinopathy of prematurity, stage 5, right eye
Exclusion: Pregnancy	H35.163	Retinopathy of prematurity, stage 5, bilateral
Exclusion: Pregnancy	H35.169	Retinopathy of prematurity, stage 5, unspecified eye
Exclusion: Pregnancy	H35.17	Retrolental fibroplasia
Exclusion: Pregnancy	H35.172	Retrolental fibroplasia, left eye
Exclusion: Pregnancy	H35.179	Retrolental fibroplasia, unspecified eye
Exclusion: Pregnancy	000.1	Tubal pregnancy
Exclusion: Pregnancy	000.10	Tubal pregnancy without intrauterine pregnancy
Exclusion: Pregnancy	000.102	Left tubal pregnancy without intrauterine pregnancy
Exclusion: Pregnancy	000.119	Unspecified tubal pregnancy with intrauterine pregnancy
Exclusion: Pregnancy	000.201	Right ovarian pregnancy without intrauterine pregnancy
Exclusion: Pregnancy	000.209	Unspecified ovarian pregnancy without intrauterine pregnancy
Exclusion: Pregnancy	000.212	Left ovarian pregnancy with intrauterine pregnancy
Exclusion: Pregnancy	000.90	Unspecified ectopic pregnancy without intrauterine pregnancy
Exclusion: Pregnancy	001	Hydatidiform mole
Exclusion: Pregnancy	001.0	Classical hydatidiform mole
Exclusion: Pregnancy	002	Other abnormal products of conception
Exclusion: Pregnancy	002.1	Missed abortion
Exclusion: Pregnancy	002.81	Inappropriate change in quantitative human chorionic gonadotropin (hCG) in early pregnancy
Exclusion: Pregnancy	002.89	Other abnormal products of conception
Exclusion: Pregnancy	003	Spontaneous abortion
Exclusion: Pregnancy	003.0	Genital tract and pelvic infection following incomplete spontaneous abortion
Exclusion: Pregnancy	003.30	Unspecified complication following incomplete spontaneous abortion
Exclusion: Pregnancy	003.33	Metabolic disorder following incomplete spontaneous abortion
Exclusion: Pregnancy	003.34	Damage to pelvic organs following incomplete spontaneous abortion
Exclusion: Pregnancy	003.35	Other venous complications following incomplete spontaneous abortion
Exclusion: Pregnancy	003.38	Urinary tract infection following incomplete spontaneous abortion
Exclusion: Pregnancy	003.4	Incomplete spontaneous abortion without complication
Exclusion: Pregnancy	003.87	Sepsis following complete or unspecified spontaneous abortion
Exclusion: Pregnancy	003.88	Urinary tract infection following complete or unspecified spontaneous abortion
Exclusion: Pregnancy	004	Complications following (induced) termination of pregnancy
Exclusion: Pregnancy	004.6	Delayed or excessive hemorrhage following (induced) termination of pregnancy
Exclusion: Pregnancy	004.7	Embolism following (induced) termination of pregnancy
Exclusion: Pregnancy	004.82	Renal failure following (induced) termination of pregnancy
Exclusion: Pregnancy	004.83	Metabolic disorder following (induced) termination of pregnancy
Exclusion: Pregnancy	004.84	Damage to pelvic organs following (induced) termination of pregnancy
Exclusion: Pregnancy	004.87	Sepsis following (induced) termination of pregnancy
Exclusion: Pregnancy	004.88	Urinary tract infection following (induced) termination of pregnancy
Exclusion: Pregnancy	004.89	(Induced) termination of pregnancy with other complications
Exclusion: Pregnancy	007.0	Genital tract and pelvic infection following failed attempted termination of pregnancy
Exclusion: Pregnancy	007.1	Delayed or excessive hemorrhage following failed attempted termination of pregnancy
Exclusion: Pregnancy	007.30	Failed attempted termination of pregnancy with unspecified complications
Exclusion: Pregnancy	007.32	Renal failure following failed attempted termination of pregnancy
Exclusion: Pregnancy	007.33	Metabolic disorder following failed attempted termination of pregnancy
Exclusion: Pregnancy	007.34	Damage to pelvic organs following failed attempted termination of pregnancy
Exclusion: Pregnancy	007.37	Sepsis following failed attempted termination of pregnancy
Exclusion: Pregnancy	007.38	Urinary tract infection following failed attempted termination of pregnancy
Exclusion: Pregnancy	007.4	Failed attempted termination of pregnancy without complication
Exclusion: Pregnancy	008	Complications following ectopic and molar pregnancy
Exclusion: Pregnancy	008.3	Shock following ectopic and molar pregnancy
Exclusion: Pregnancy	008.4	Renal failure following ectopic and molar pregnancy
Exclusion: Pregnancy	008.6	Damage to pelvic organs and tissues following an ectopic and molar pregnancy
Exclusion: Pregnancy	008.8	Other complications following an ectopic and molar pregnancy
Exclusion: Pregnancy	008.82	Sepsis following ectopic and molar pregnancy
Exclusion: Pregnancy	008.83	Urinary tract infection following an ectopic and molar pregnancy
Exclusion: Pregnancy	008.9	Unspecified complication following an ectopic and molar pregnancy
Exclusion: Pregnancy	009.0	Supervision of pregnancy with history of infertility
Exclusion: Pregnancy	009.01	Supervision of pregnancy with history of infertility, first trimester
Exclusion: Pregnancy	009.1	Supervision of pregnancy with history of ectopic pregnancy
Exclusion: Pregnancy	009.11	Supervision of pregnancy with history of ectopic pregnancy, first trimester
Exclusion: Pregnancy	009.13	Supervision of pregnancy with history of ectopic pregnancy, third trimester
Exclusion: Pregnancy	009.2	Supervision of pregnancy with other poor reproductive or obstetric history
Exclusion: Pregnancy	009.21	Supervision of pregnancy with history of pre
Exclusion: Pregnancy	009.211	Supervision of pregnancy with history of pre
Exclusion: Pregnancy	009.291	Supervision of pregnancy with other poor reproductive or obstetric history, first trimester
Exclusion: Pregnancy	009.299	Supervision of pregnancy with other poor reproductive or obstetric history, unspecified trimester
Exclusion: Pregnancy	009.3	Supervision of pregnancy with insufficient antenatal care
Exclusion: Pregnancy	009.31	Supervision of pregnancy with insufficient antenatal care, first trimester
Exclusion: Pregnancy	009.32	Supervision of pregnancy with insufficient antenatal care, second trimester
Exclusion: Pregnancy	009.33	Supervision of pregnancy with insufficient antenatal care, third trimester
Exclusion: Pregnancy	009.40	Supervision of pregnancy with grand multiparity, unspecified trimester
Exclusion: Pregnancy	009.41	Supervision of pregnancy with grand multiparity, first trimester
Exclusion: Pregnancy	009.5	Supervision of elderly primigravida and multigravida
Exclusion: Pregnancy	009.511	Supervision of elderly primigravida, first trimester
Exclusion: Pregnancy	009.513	Supervision of elderly primigravida, third trimester
Exclusion: Pregnancy	009.519	Supervision of elderly primigravida, unspecified trimester
Exclusion: Pregnancy	009.523	Supervision of elderly multigravida, third trimester
Exclusion: Pregnancy	009.6	Supervision of young primigravida and multigravida
Exclusion: Pregnancy	009.61	Supervision of young primigravida
Exclusion: Pregnancy	009.611	Supervision of young primigravida, first trimester
Exclusion: Pregnancy	009.612	Supervision of young primigravida, second trimester
Exclusion: Pregnancy	009.622	Supervision of young multigravida, second trimester
Exclusion: Pregnancy	009.623	Supervision of young multigravida, third trimester
Exclusion: Pregnancy	009.629	Supervision of young multigravida, unspecified trimester
Exclusion: Pregnancy	009.71	Supervision of high risk pregnancy due to social problems, first trimester
Exclusion: Pregnancy	009.72	Supervision of high risk pregnancy due to social problems, second trimester
Exclusion: Pregnancy	009.73	Supervision of high risk pregnancy due to social problems, third trimester
Exclusion: Pregnancy	009.81	Supervision of pregnancy resulting from assisted reproductive technology
Exclusion: Pregnancy	009.811	Supervision of pregnancy resulting from assisted reproductive technology, first trimester
Exclusion: Pregnancy	009.822	Supervision of pregnancy with history of in utero procedure during previous pregnancy, second trimester
Exclusion: Pregnancy	009.823	Supervision of pregnancy with history of in utero procedure during previous pregnancy, third trimester

Appendix A: Codes

Exclusion: Pregnancy	009.829	Supervision of pregnancy with history of in utero procedure during previous pregnancy, unspecified trimester
Exclusion: Pregnancy	009.891	Supervision of other high risk pregnancies, first trimester
Exclusion: Pregnancy	009.91	Supervision of high risk pregnancy, unspecified, first trimester
Exclusion: Pregnancy	009.92	Supervision of high risk pregnancy, unspecified, second trimester
Exclusion: Pregnancy	009.93	Supervision of high risk pregnancy, unspecified, third trimester
Exclusion: Pregnancy	009.A1	Supervision of pregnancy with history of molar pregnancy, first trimester
Exclusion: Pregnancy	010.011	Pre
Exclusion: Pregnancy	010.012	Pre
Exclusion: Pregnancy	010.013	Pre
Exclusion: Pregnancy	010.019	Pre
Exclusion: Pregnancy	010.1	Pre
Exclusion: Pregnancy	010.112	Pre
Exclusion: Pregnancy	010.119	Pre
Exclusion: Pregnancy	010.12	Pre
Exclusion: Pregnancy	010.219	Pre
Exclusion: Pregnancy	010.23	Pre
Exclusion: Pregnancy	010.31	Pre
Exclusion: Pregnancy	010.313	Pre
Exclusion: Pregnancy	010.319	Pre
Exclusion: Pregnancy	010.33	Pre
Exclusion: Pregnancy	010.411	Pre
Exclusion: Pregnancy	010.412	Pre
Exclusion: Pregnancy	010.413	Pre
Exclusion: Pregnancy	010.42	Pre
Exclusion: Pregnancy	010.91	Unspecified pre
Exclusion: Pregnancy	010.911	Unspecified pre
Exclusion: Pregnancy	010.913	Unspecified pre
Exclusion: Pregnancy	011	Pre
Exclusion: Pregnancy	011.1	Pre
Exclusion: Pregnancy	011.3	Pre
Exclusion: Pregnancy	011.4	Pre
Exclusion: Pregnancy	011.5	Pre
Exclusion: Pregnancy	011.9	Pre
Exclusion: Pregnancy	012	Gestational [pregnancy
Exclusion: Pregnancy	012.0	Gestational edema
Exclusion: Pregnancy	012.01	Gestational edema, first trimester
Exclusion: Pregnancy	012.03	Gestational edema, third trimester
Exclusion: Pregnancy	012.05	Gestational edema, complicating the puerperium
Exclusion: Pregnancy	012.10	Gestational proteinuria, unspecified trimester
Exclusion: Pregnancy	012.12	Gestational proteinuria, second trimester
Exclusion: Pregnancy	012.14	Gestational proteinuria, complicating childbirth
Exclusion: Pregnancy	012.15	Gestational proteinuria, complicating the puerperium
Exclusion: Pregnancy	012.2	Gestational edema with proteinuria
Exclusion: Pregnancy	012.20	Gestational edema with proteinuria, unspecified trimester
Exclusion: Pregnancy	012.22	Gestational edema with proteinuria, second trimester
Exclusion: Pregnancy	012.24	Gestational edema with proteinuria, complicating childbirth
Exclusion: Pregnancy	012.25	Gestational edema with proteinuria, complicating the puerperium
Exclusion: Pregnancy	013	Gestational [pregnancy
Exclusion: Pregnancy	013.1	Gestational [pregnancy
Exclusion: Pregnancy	013.5	Gestational [pregnancy
Exclusion: Pregnancy	013.9	Gestational [pregnancy
Exclusion: Pregnancy	014.02	Mild to moderate pre
Exclusion: Pregnancy	014.10	Severe pre
Exclusion: Pregnancy	014.12	Severe pre
Exclusion: Pregnancy	014.15	Severe pre
Exclusion: Pregnancy	014.2	HELLP syndrome
Exclusion: Pregnancy	014.25	HELLP syndrome, complicating the puerperium
Exclusion: Pregnancy	014.9	Unspecified pre
Exclusion: Pregnancy	014.90	Unspecified pre
Exclusion: Pregnancy	014.93	Unspecified pre
Exclusion: Pregnancy	015.03	Eclampsia complicating pregnancy, third trimester
Exclusion: Pregnancy	015.9	Eclampsia, unspecified as to time period
Exclusion: Pregnancy	016.1	Unspecified maternal hypertension, first trimester
Exclusion: Pregnancy	016.3	Unspecified maternal hypertension, third trimester
Exclusion: Pregnancy	020.0	Threatened abortion
Exclusion: Pregnancy	020.8	Other hemorrhage in early pregnancy
Exclusion: Pregnancy	021	Excessive vomiting in pregnancy
Exclusion: Pregnancy	021.2	Late vomiting of pregnancy
Exclusion: Pregnancy	021.9	Vomiting of pregnancy, unspecified
Exclusion: Pregnancy	022.0	Varicose veins of lower extremity in pregnancy
Exclusion: Pregnancy	022.00	Varicose veins of lower extremity in pregnancy, unspecified trimester
Exclusion: Pregnancy	022.01	Varicose veins of lower extremity in pregnancy, first trimester
Exclusion: Pregnancy	022.1	Genital varices in pregnancy
Exclusion: Pregnancy	022.10	Genital varices in pregnancy, unspecified trimester
Exclusion: Pregnancy	022.11	Genital varices in pregnancy, first trimester
Exclusion: Pregnancy	022.12	Genital varices in pregnancy, second trimester
Exclusion: Pregnancy	022.13	Genital varices in pregnancy, third trimester
Exclusion: Pregnancy	022.21	Superficial thrombophlebitis in pregnancy, first trimester
Exclusion: Pregnancy	022.30	Deep phlebotrombosis in pregnancy, unspecified trimester
Exclusion: Pregnancy	022.31	Deep phlebotrombosis in pregnancy, first trimester
Exclusion: Pregnancy	022.32	Deep phlebotrombosis in pregnancy, second trimester
Exclusion: Pregnancy	022.5	Cerebral venous thrombosis in pregnancy
Exclusion: Pregnancy	022.50	Cerebral venous thrombosis in pregnancy, unspecified trimester
Exclusion: Pregnancy	022.51	Cerebral venous thrombosis in pregnancy, first trimester
Exclusion: Pregnancy	022.8X	Other venous complications in pregnancy
Exclusion: Pregnancy	022.8X1	Other venous complications in pregnancy, first trimester
Exclusion: Pregnancy	022.8X2	Other venous complications in pregnancy, second trimester
Exclusion: Pregnancy	022.8X9	Other venous complications in pregnancy, unspecified trimester
Exclusion: Pregnancy	022.9	Venous complication in pregnancy, unspecified
Exclusion: Pregnancy	022.90	Venous complication in pregnancy, unspecified, unspecified trimester
Exclusion: Pregnancy	022.92	Venous complication in pregnancy, unspecified, second trimester
Exclusion: Pregnancy	023.10	Infections of bladder in pregnancy, unspecified trimester
Exclusion: Pregnancy	023.11	Infections of bladder in pregnancy, first trimester
Exclusion: Pregnancy	023.12	Infections of bladder in pregnancy, second trimester
Exclusion: Pregnancy	023.2	Infections of urethra in pregnancy
Exclusion: Pregnancy	023.30	Infections of other parts of urinary tract in pregnancy, unspecified trimester
Exclusion: Pregnancy	023.31	Infections of other parts of urinary tract in pregnancy, first trimester
Exclusion: Pregnancy	023.4	Unspecified infection of urinary tract in pregnancy
Exclusion: Pregnancy	023.40	Unspecified infection of urinary tract in pregnancy, unspecified trimester
Exclusion: Pregnancy	023.41	Unspecified infection of urinary tract in pregnancy, first trimester
Exclusion: Pregnancy	023.43	Unspecified infection of urinary tract in pregnancy, third trimester
Exclusion: Pregnancy	023.51	Infection of cervix in pregnancy
Exclusion: Pregnancy	023.511	Infections of cervix in pregnancy, first trimester
Exclusion: Pregnancy	023.512	Infections of cervix in pregnancy, second trimester
Exclusion: Pregnancy	023.513	Infections of cervix in pregnancy, third trimester
Exclusion: Pregnancy	023.519	Infections of cervix in pregnancy, unspecified trimester
Exclusion: Pregnancy	023.521	Salpingo
Exclusion: Pregnancy	023.522	Salpingo

Appendix A: Codes

Exclusion: Pregnancy	023.523	Salpingo
Exclusion: Pregnancy	023.592	Infection of other part of genital tract in pregnancy, second trimester
Exclusion: Pregnancy	023.91	Unspecified genitourinary tract infection in pregnancy, first trimester
Exclusion: Pregnancy	023.92	Unspecified genitourinary tract infection in pregnancy, second trimester
Exclusion: Pregnancy	024	Diabetes mellitus in pregnancy, childbirth, and the puerperium
Exclusion: Pregnancy	024.0	Pre
Exclusion: Pregnancy	024.011	Pre
Exclusion: Pregnancy	024.03	Pre
Exclusion: Pregnancy	024.1	Pre
Exclusion: Pregnancy	024.12	Pre
Exclusion: Pregnancy	024.13	Pre
Exclusion: Pregnancy	024.3	Unspecified pre
Exclusion: Pregnancy	024.311	Unspecified pre
Exclusion: Pregnancy	024.32	Unspecified pre
Exclusion: Pregnancy	024.414	Gestational diabetes mellitus in pregnancy, insulin controlled
Exclusion: Pregnancy	024.42	Gestational diabetes mellitus in childbirth
Exclusion: Pregnancy	024.420	Gestational diabetes mellitus in childbirth, diet controlled
Exclusion: Pregnancy	024.429	Gestational diabetes mellitus in childbirth, unspecified control
Exclusion: Pregnancy	024.43	Gestational diabetes mellitus in the puerperium
Exclusion: Pregnancy	024.430	Gestational diabetes mellitus in the puerperium, diet controlled
Exclusion: Pregnancy	024.434	Gestational diabetes mellitus in the puerperium, insulin controlled
Exclusion: Pregnancy	024.435	Gestational diabetes mellitus in puerperium, controlled by oral hypoglycemic drugs
Exclusion: Pregnancy	024.439	Gestational diabetes mellitus in the puerperium, unspecified control
Exclusion: Pregnancy	024.8	Other pre
Exclusion: Pregnancy	024.811	Other pre
Exclusion: Pregnancy	024.813	Other pre
Exclusion: Pregnancy	024.83	Other pre
Exclusion: Pregnancy	024.9	Unspecified diabetes mellitus in pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	024.91	Unspecified diabetes mellitus in pregnancy
Exclusion: Pregnancy	024.912	Unspecified diabetes mellitus in pregnancy, second trimester
Exclusion: Pregnancy	025	Malnutrition in pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	025.11	Malnutrition in pregnancy, first trimester
Exclusion: Pregnancy	025.3	Malnutrition in the puerperium
Exclusion: Pregnancy	026	Maternal care for other conditions predominantly related to pregnancy
Exclusion: Pregnancy	026.02	Excessive weight gain in pregnancy, second trimester
Exclusion: Pregnancy	026.03	Excessive weight gain in pregnancy, third trimester
Exclusion: Pregnancy	026.1	Low weight gain in pregnancy
Exclusion: Pregnancy	026.10	Low weight gain in pregnancy, unspecified trimester
Exclusion: Pregnancy	026.11	Low weight gain in pregnancy, first trimester
Exclusion: Pregnancy	026.12	Low weight gain in pregnancy, second trimester
Exclusion: Pregnancy	026.13	Low weight gain in pregnancy, third trimester
Exclusion: Pregnancy	026.2	Pregnancy care for patient with recurrent pregnancy loss
Exclusion: Pregnancy	026.21	Pregnancy care for patient with recurrent pregnancy loss, first trimester
Exclusion: Pregnancy	026.22	Pregnancy care for patient with recurrent pregnancy loss, second trimester
Exclusion: Pregnancy	026.23	Pregnancy care for patient with recurrent pregnancy loss, third trimester
Exclusion: Pregnancy	026.3	Retained intrauterine contraceptive device in pregnancy
Exclusion: Pregnancy	026.31	Retained intrauterine contraceptive device in pregnancy, first trimester
Exclusion: Pregnancy	026.33	Retained intrauterine contraceptive device in pregnancy, third trimester
Exclusion: Pregnancy	026.42	Herpes gestationis, second trimester
Exclusion: Pregnancy	026.43	Herpes gestationis, third trimester
Exclusion: Pregnancy	026.51	Maternal hypotension syndrome, first trimester
Exclusion: Pregnancy	026.53	Maternal hypotension syndrome, third trimester
Exclusion: Pregnancy	026.6	Liver and biliary tract disorders in pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	026.612	Liver and biliary tract disorders in pregnancy, second trimester
Exclusion: Pregnancy	026.613	Liver and biliary tract disorders in pregnancy, third trimester
Exclusion: Pregnancy	026.71	Subluxation of symphysis (pubis) in pregnancy
Exclusion: Pregnancy	026.712	Subluxation of symphysis (pubis) in pregnancy, second trimester
Exclusion: Pregnancy	026.73	Subluxation of symphysis (pubis) in the puerperium
Exclusion: Pregnancy	026.811	Pregnancy related exhaustion and fatigue, first trimester
Exclusion: Pregnancy	026.812	Pregnancy related exhaustion and fatigue, second trimester
Exclusion: Pregnancy	026.82	Pregnancy related peripheral neuritis
Exclusion: Pregnancy	026.821	Pregnancy related peripheral neuritis, first trimester
Exclusion: Pregnancy	026.823	Pregnancy related peripheral neuritis, third trimester
Exclusion: Pregnancy	026.831	Pregnancy related renal disease, first trimester
Exclusion: Pregnancy	026.839	Pregnancy related renal disease, unspecified trimester
Exclusion: Pregnancy	026.84	Uterine size
Exclusion: Pregnancy	026.842	Uterine size
Exclusion: Pregnancy	026.851	Spotting complicating pregnancy, first trimester
Exclusion: Pregnancy	026.853	Spotting complicating pregnancy, third trimester
Exclusion: Pregnancy	026.859	Spotting complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	026.86	Pruritic urticarial papules and plaques of pregnancy (PUPPP)
Exclusion: Pregnancy	026.87	Cervical shortening
Exclusion: Pregnancy	026.873	Cervical shortening, third trimester
Exclusion: Pregnancy	026.893	Other specified pregnancy related conditions, third trimester
Exclusion: Pregnancy	026.899	Other specified pregnancy related conditions, unspecified trimester
Exclusion: Pregnancy	026.90	Pregnancy related conditions, unspecified, unspecified trimester
Exclusion: Pregnancy	028	Abnormal findings on antenatal screening of mother
Exclusion: Pregnancy	028.0	Abnormal hematological finding on antenatal screening of mother
Exclusion: Pregnancy	028.3	Abnormal ultrasonic finding on antenatal screening of mother
Exclusion: Pregnancy	028.5	Abnormal chromosomal and genetic finding on antenatal screening of mother
Exclusion: Pregnancy	029.0	Pulmonary complications of anesthesia during pregnancy
Exclusion: Pregnancy	029.01	Aspiration pneumonitis due to anesthesia during pregnancy
Exclusion: Pregnancy	029.012	Aspiration pneumonitis due to anesthesia during pregnancy, second trimester
Exclusion: Pregnancy	029.013	Aspiration pneumonitis due to anesthesia during pregnancy, third trimester
Exclusion: Pregnancy	029.02	Pressure collapse of lung due to anesthesia during pregnancy
Exclusion: Pregnancy	029.021	Pressure collapse of lung due to anesthesia during pregnancy, first trimester
Exclusion: Pregnancy	029.022	Pressure collapse of lung due to anesthesia during pregnancy, second trimester
Exclusion: Pregnancy	029.029	Other pulmonary complications of anesthesia during pregnancy, second trimester
Exclusion: Pregnancy	029.093	Other pulmonary complications of anesthesia during pregnancy, third trimester
Exclusion: Pregnancy	029.1	Cardiac complications of anesthesia during pregnancy
Exclusion: Pregnancy	029.11	Cardiac arrest due to anesthesia during pregnancy
Exclusion: Pregnancy	029.111	Cardiac arrest due to anesthesia during pregnancy, first trimester
Exclusion: Pregnancy	029.112	Cardiac arrest due to anesthesia during pregnancy, second trimester
Exclusion: Pregnancy	029.119	Cardiac arrest due to anesthesia during pregnancy, unspecified trimester
Exclusion: Pregnancy	029.12	Cardiac failure due to anesthesia during pregnancy
Exclusion: Pregnancy	029.121	Cardiac failure due to anesthesia during pregnancy, first trimester
Exclusion: Pregnancy	029.123	Cardiac failure due to anesthesia during pregnancy, third trimester
Exclusion: Pregnancy	029.193	Other cardiac complications of anesthesia during pregnancy, third trimester
Exclusion: Pregnancy	029.199	Other cardiac complications of anesthesia during pregnancy, unspecified trimester
Exclusion: Pregnancy	029.2	Central nervous system complications of anesthesia during pregnancy
Exclusion: Pregnancy	029.211	Cerebral anoxia due to anesthesia during pregnancy, first trimester
Exclusion: Pregnancy	029.292	Other central nervous system complications of anesthesia during pregnancy, second trimester
Exclusion: Pregnancy	029.293	Other central nervous system complications of anesthesia during pregnancy, third trimester
Exclusion: Pregnancy	029.3X	Toxic reaction to local anesthesia during pregnancy
Exclusion: Pregnancy	029.3X1	Toxic reaction to local anesthesia during pregnancy, first trimester
Exclusion: Pregnancy	029.3X3	Toxic reaction to local anesthesia during pregnancy, third trimester
Exclusion: Pregnancy	029.3X9	Toxic reaction to local anesthesia during pregnancy, unspecified trimester
Exclusion: Pregnancy	029.4	Spinal and epidural anesthesia induced headache during pregnancy

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Exclusion: Pregnancy	029.41	Spinal and epidural anesthesia induced headache during pregnancy, first trimester
Exclusion: Pregnancy	029.42	Spinal and epidural anesthesia induced headache during pregnancy, second trimester
Exclusion: Pregnancy	029.5X1	Other complications of spinal and epidural anesthesia during pregnancy, first trimester
Exclusion: Pregnancy	029.5X2	Other complications of spinal and epidural anesthesia during pregnancy, second trimester
Exclusion: Pregnancy	029.5X3	Other complications of spinal and epidural anesthesia during pregnancy, third trimester
Exclusion: Pregnancy	029.6	Failed or difficult intubation for anesthesia during pregnancy
Exclusion: Pregnancy	029.60	Failed or difficult intubation for anesthesia during pregnancy, unspecified trimester
Exclusion: Pregnancy	029.61	Failed or difficult intubation for anesthesia during pregnancy, first trimester
Exclusion: Pregnancy	029.63	Failed or difficult intubation for anesthesia during pregnancy, third trimester
Exclusion: Pregnancy	029.8X	Other complications of anesthesia during pregnancy
Exclusion: Pregnancy	029.8X3	Other complications of anesthesia during pregnancy, third trimester
Exclusion: Pregnancy	029.91	Unspecified complication of anesthesia during pregnancy, first trimester
Exclusion: Pregnancy	029.93	Unspecified complication of anesthesia during pregnancy, third trimester
Exclusion: Pregnancy	030.0	Twin pregnancy
Exclusion: Pregnancy	030.001	Twin pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, first trimester
Exclusion: Pregnancy	030.002	Twin pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, second trimester
Exclusion: Pregnancy	030.009	Twin pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, unspecified trimester
Exclusion: Pregnancy	030.01	Twin pregnancy, monochorionic/monoamniotic
Exclusion: Pregnancy	030.011	Twin pregnancy, monochorionic/monoamniotic, first trimester
Exclusion: Pregnancy	030.012	Twin pregnancy, monochorionic/monoamniotic, second trimester
Exclusion: Pregnancy	030.019	Twin pregnancy, monochorionic/monoamniotic, unspecified trimester
Exclusion: Pregnancy	030.021	Conjoined twin pregnancy, first trimester
Exclusion: Pregnancy	030.023	Conjoined twin pregnancy, third trimester
Exclusion: Pregnancy	030.031	Twin pregnancy, monochorionic/diamniotic, first trimester
Exclusion: Pregnancy	030.032	Twin pregnancy, monochorionic/diamniotic, second trimester
Exclusion: Pregnancy	030.033	Twin pregnancy, monochorionic/diamniotic, third trimester
Exclusion: Pregnancy	030.041	Twin pregnancy, dichorionic/diamniotic, first trimester
Exclusion: Pregnancy	030.042	Twin pregnancy, dichorionic/diamniotic, second trimester
Exclusion: Pregnancy	030.043	Twin pregnancy, dichorionic/diamniotic, third trimester
Exclusion: Pregnancy	030.049	Twin pregnancy, dichorionic/diamniotic, unspecified trimester
Exclusion: Pregnancy	030.091	Twin pregnancy, unable to determine number of placenta and number of amniotic sacs, first trimester
Exclusion: Pregnancy	030.092	Twin pregnancy, unable to determine number of placenta and number of amniotic sacs, second trimester
Exclusion: Pregnancy	030.102	Triplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, second trimester
Exclusion: Pregnancy	030.103	Triplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, third trimester
Exclusion: Pregnancy	030.109	Triplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, unspecified trimester
Exclusion: Pregnancy	030.111	Triplet pregnancy with two or more monochorionic fetuses, first trimester
Exclusion: Pregnancy	030.113	Triplet pregnancy with two or more monochorionic fetuses, third trimester
Exclusion: Pregnancy	030.12	Triplet pregnancy with two or more monoamniotic fetuses
Exclusion: Pregnancy	030.121	Triplet pregnancy with two or more monoamniotic fetuses, first trimester
Exclusion: Pregnancy	030.129	Triplet pregnancy with two or more monoamniotic fetuses, unspecified trimester
Exclusion: Pregnancy	030.131	Triplet pregnancy, trichorionic/triamniotic, first trimester
Exclusion: Pregnancy	030.132	Triplet pregnancy, trichorionic/triamniotic, second trimester
Exclusion: Pregnancy	030.191	Triplet pregnancy, unable to determine number of placenta and number of amniotic sacs, first trimester
Exclusion: Pregnancy	030.2	Quadruplet pregnancy
Exclusion: Pregnancy	030.211	Quadruplet pregnancy with two or more monochorionic fetuses, first trimester
Exclusion: Pregnancy	030.219	Quadruplet pregnancy with two or more monochorionic fetuses, unspecified trimester
Exclusion: Pregnancy	030.22	Quadruplet pregnancy with two or more monoamniotic fetuses
Exclusion: Pregnancy	030.222	Quadruplet pregnancy with two or more monoamniotic fetuses, second trimester
Exclusion: Pregnancy	030.223	Quadruplet pregnancy with two or more monoamniotic fetuses, third trimester
Exclusion: Pregnancy	030.23	Quadruplet pregnancy, quadrachorionic/quadra
Exclusion: Pregnancy	030.231	Quadruplet pregnancy, quadrachorionic/quadra
Exclusion: Pregnancy	030.239	Quadruplet pregnancy, quadrachorionic/quadra
Exclusion: Pregnancy	030.292	Quadruplet pregnancy, unable to determine number of placenta and number of amniotic sacs, second trimester
Exclusion: Pregnancy	030.293	Quadruplet pregnancy, unable to determine number of placenta and number of amniotic sacs, third trimester
Exclusion: Pregnancy	030.8	Other specified multiple gestation
Exclusion: Pregnancy	030.801	Other specified multiple gestation, unspecified number of placenta and unspecified number of amniotic sacs, first trimester
Exclusion: Pregnancy	030.809	Other specified multiple gestation, unspecified number of placenta and unspecified number of amniotic sacs, unspecified trimester
Exclusion: Pregnancy	030.81	Other specified multiple gestation with two or more monochorionic fetuses
Exclusion: Pregnancy	030.811	Other specified multiple gestation with two or more monochorionic fetuses, first trimester
Exclusion: Pregnancy	030.812	Other specified multiple gestation with two or more monochorionic fetuses, second trimester
Exclusion: Pregnancy	030.813	Other specified multiple gestation with two or more monochorionic fetuses, third trimester
Exclusion: Pregnancy	030.819	Other specified multiple gestation with two or more monochorionic fetuses, unspecified trimester
Exclusion: Pregnancy	030.822	Other specified multiple gestation with two or more monoamniotic fetuses, second trimester
Exclusion: Pregnancy	030.823	Other specified multiple gestation with two or more monoamniotic fetuses, third trimester
Exclusion: Pregnancy	030.83	Other specified multiple gestation, number of chorions and amnions are both equal to the number of fetuses
Exclusion: Pregnancy	030.831	Other specified multiple gestation, number of chorions and amnions are both equal to the number of fetuses, first trimester
Exclusion: Pregnancy	030.832	Other specified multiple gestation, number of chorions and amnions are both equal to the number of fetuses, second trimester
Exclusion: Pregnancy	030.839	Other specified multiple gestation, number of chorions and amnions are both equal to the number of fetuses, unspecified trimester
Exclusion: Pregnancy	030.89	Other specified multiple gestation, unable to determine number of placenta and number of amniotic sacs
Exclusion: Pregnancy	030.891	Other specified multiple gestation, unable to determine number of placenta and number of amniotic sacs, first trimester
Exclusion: Pregnancy	030.892	Other specified multiple gestation, unable to determine number of placenta and number of amniotic sacs, second trimester
Exclusion: Pregnancy	030.893	Other specified multiple gestation, unable to determine number of placenta and number of amniotic sacs, third trimester
Exclusion: Pregnancy	030.9	Multiple gestation, unspecified
Exclusion: Pregnancy	030.91	Multiple gestation, unspecified, first trimester
Exclusion: Pregnancy	030.92	Multiple gestation, unspecified, second trimester
Exclusion: Pregnancy	031	Complications specific to multiple gestation
Exclusion: Pregnancy	031.00X1	Papryaceous fetus, unspecified trimester, fetus 1
Exclusion: Pregnancy	031.00X4	Papryaceous fetus, unspecified trimester, fetus 4
Exclusion: Pregnancy	031.00X5	Papryaceous fetus, unspecified trimester, fetus 5
Exclusion: Pregnancy	031.00X9	Papryaceous fetus, unspecified trimester, other fetus
Exclusion: Pregnancy	031.01X0	Papryaceous fetus, first trimester, not applicable or unspecified
Exclusion: Pregnancy	031.01X1	Papryaceous fetus, first trimester, fetus 1
Exclusion: Pregnancy	031.01X2	Papryaceous fetus, first trimester, fetus 2
Exclusion: Pregnancy	031.01X5	Papryaceous fetus, first trimester, fetus 5
Exclusion: Pregnancy	031.01X9	Papryaceous fetus, first trimester, other fetus
Exclusion: Pregnancy	031.02	Papryaceous fetus, second trimester
Exclusion: Pregnancy	031.02X0	Papryaceous fetus, second trimester, not applicable or unspecified
Exclusion: Pregnancy	031.02X3	Papryaceous fetus, second trimester, fetus 3
Exclusion: Pregnancy	031.02X9	Papryaceous fetus, second trimester, other fetus
Exclusion: Pregnancy	031.13	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester
Exclusion: Pregnancy	031.13X1	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 1
Exclusion: Pregnancy	031.13X3	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 3
Exclusion: Pregnancy	031.13X4	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 4
Exclusion: Pregnancy	031.13X5	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 5
Exclusion: Pregnancy	031.13X9	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, other fetus
Exclusion: Pregnancy	031.2	Continuing pregnancy after intrauterine death of one fetus or more
Exclusion: Pregnancy	031.20X2	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester, fetus 2
Exclusion: Pregnancy	031.20X4	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester, fetus 4
Exclusion: Pregnancy	031.20X5	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester, fetus 5
Exclusion: Pregnancy	031.22	Continuing pregnancy after intrauterine death of one fetus or more, second trimester
Exclusion: Pregnancy	031.22X	
Exclusion: Pregnancy	031.22X0	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, not applicable or unspecified
Exclusion: Pregnancy	031.22X1	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 1
Exclusion: Pregnancy	031.22X2	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 2
Exclusion: Pregnancy	031.22X3	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 3
Exclusion: Pregnancy	031.22X5	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 5
Exclusion: Pregnancy	031.3	Continuing pregnancy after elective fetal reduction of one fetus or more
Exclusion: Pregnancy	031.30X0	Continuing pregnancy after elective fetal reduction of one fetus or more, unspecified trimester, not applicable or unspecified

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Exclusion: Pregnancy	031.30X1	Continuing pregnancy after elective fetal reduction of one fetus or more, unspecified trimester, fetus 1
Exclusion: Pregnancy	031.30X2	Continuing pregnancy after elective fetal reduction of one fetus or more, unspecified trimester, fetus 2
Exclusion: Pregnancy	031.30X3	Continuing pregnancy after elective fetal reduction of one fetus or more, unspecified trimester, fetus 3
Exclusion: Pregnancy	031.30X4	Continuing pregnancy after elective fetal reduction of one fetus or more, unspecified trimester, fetus 4
Exclusion: Pregnancy	031.30X5	Continuing pregnancy after elective fetal reduction of one fetus or more, unspecified trimester, fetus 5
Exclusion: Pregnancy	031.30X9	Continuing pregnancy after elective fetal reduction of one fetus or more, unspecified trimester, other fetus
Exclusion: Pregnancy	031.8X10	Other complications specific to multiple gestation, first trimester, not applicable or unspecified
Exclusion: Pregnancy	031.8X11	Other complications specific to multiple gestation, first trimester, fetus 1
Exclusion: Pregnancy	031.8X14	Other complications specific to multiple gestation, first trimester, fetus 4
Exclusion: Pregnancy	031.8X15	Other complications specific to multiple gestation, first trimester, fetus 5
Exclusion: Pregnancy	031.8X20	Other complications specific to multiple gestation, second trimester, not applicable or unspecified
Exclusion: Pregnancy	031.8X24	Other complications specific to multiple gestation, second trimester, fetus 4
Exclusion: Pregnancy	031.8X29	Other complications specific to multiple gestation, second trimester, other fetus
Exclusion: Pregnancy	031.8X3	Other complications specific to multiple gestation, third trimester
Exclusion: Pregnancy	031.8X35	Other complications specific to multiple gestation, third trimester, fetus 5
Exclusion: Pregnancy	031.8X39	Other complications specific to multiple gestation, third trimester, other fetus
Exclusion: Pregnancy	031.8X90	Other complications specific to multiple gestation, unspecified trimester, not applicable or unspecified
Exclusion: Pregnancy	031.8X91	Other complications specific to multiple gestation, unspecified trimester, fetus 1
Exclusion: Pregnancy	031.8X92	Other complications specific to multiple gestation, unspecified trimester, fetus 2
Exclusion: Pregnancy	031.8X94	Other complications specific to multiple gestation, unspecified trimester, fetus 4
Exclusion: Pregnancy	032	Maternal care for malpresentation of fetus
Exclusion: Pregnancy	033	Maternal care for disproportion
Exclusion: Pregnancy	033.1	Maternal care for disproportion due to generally contracted pelvis
Exclusion: Pregnancy	033.2	Maternal care for disproportion due to inlet contraction of pelvis
Exclusion: Pregnancy	033.8	Maternal care for disproportion of other origin
Exclusion: Pregnancy	033.9	Maternal care for disproportion, unspecified
Exclusion: Pregnancy	034.0	Maternal care for congenital malformation of uterus
Exclusion: Pregnancy	034.00	Maternal care for unspecified congenital malformation of uterus, unspecified trimester
Exclusion: Pregnancy	034.01	Maternal care for unspecified congenital malformation of uterus, first trimester
Exclusion: Pregnancy	034.03	Maternal care for unspecified congenital malformation of uterus, third trimester
Exclusion: Pregnancy	034.12	Maternal care for benign tumor of corpus uteri, second trimester
Exclusion: Pregnancy	034.21	Maternal care for scar from previous cesarean delivery
Exclusion: Pregnancy	034.211	Maternal care for low transverse scar from previous cesarean delivery
Exclusion: Pregnancy	034.219	Maternal care for unspecified type scar from previous cesarean delivery
Exclusion: Pregnancy	034.3	Maternal care for cervical incompetence
Exclusion: Pregnancy	034.30	Maternal care for cervical incompetence, unspecified trimester
Exclusion: Pregnancy	034.33	Maternal care for cervical incompetence, third trimester
Exclusion: Pregnancy	034.40	Maternal care for other abnormalities of cervix, unspecified trimester
Exclusion: Pregnancy	034.42	Maternal care for other abnormalities of cervix, second trimester
Exclusion: Pregnancy	034.43	Maternal care for other abnormalities of cervix, third trimester
Exclusion: Pregnancy	034.5	Maternal care for other abnormalities of gravid uterus
Exclusion: Pregnancy	034.511	Maternal care for incarceration of gravid uterus, first trimester
Exclusion: Pregnancy	034.512	Maternal care for incarceration of gravid uterus, second trimester
Exclusion: Pregnancy	034.513	Maternal care for incarceration of gravid uterus, third trimester
Exclusion: Pregnancy	034.519	Maternal care for incarceration of gravid uterus, unspecified trimester
Exclusion: Pregnancy	034.52	Maternal care for prolapse of gravid uterus
Exclusion: Pregnancy	034.522	Maternal care for prolapse of gravid uterus, second trimester
Exclusion: Pregnancy	034.523	Maternal care for prolapse of gravid uterus, third trimester
Exclusion: Pregnancy	034.529	Maternal care for prolapse of gravid uterus, unspecified trimester
Exclusion: Pregnancy	034.531	Maternal care for retroversion of gravid uterus, first trimester
Exclusion: Pregnancy	034.532	Maternal care for retroversion of gravid uterus, second trimester
Exclusion: Pregnancy	034.539	Maternal care for retroversion of gravid uterus, unspecified trimester
Exclusion: Pregnancy	034.59	Maternal care for other abnormalities of gravid uterus
Exclusion: Pregnancy	034.592	Maternal care for other abnormalities of gravid uterus, second trimester
Exclusion: Pregnancy	034.6	Maternal care for abnormality of vagina
Exclusion: Pregnancy	034.60	Maternal care for abnormality of vagina, unspecified trimester
Exclusion: Pregnancy	034.62	Maternal care for abnormality of vagina, second trimester
Exclusion: Pregnancy	034.7	Maternal care for abnormality of vulva and perineum
Exclusion: Pregnancy	034.72	Maternal care for abnormality of vulva and perineum, second trimester
Exclusion: Pregnancy	034.81	Maternal care for other abnormalities of pelvic organs, first trimester
Exclusion: Pregnancy	034.82	Maternal care for other abnormalities of pelvic organs, second trimester
Exclusion: Pregnancy	034.83	Maternal care for other abnormalities of pelvic organs, third trimester
Exclusion: Pregnancy	034.93	Maternal care for abnormality of pelvic organ, unspecified, third trimester
Exclusion: Pregnancy	035	Maternal care for known or suspected fetal abnormality and damage
Exclusion: Pregnancy	035.1	Maternal care for (suspected) chromosomal abnormality in fetus
Exclusion: Pregnancy	035.1X	
Exclusion: Pregnancy	035.1XX	
Exclusion: Pregnancy	035.1XX2	Maternal care for (suspected) chromosomal abnormality in fetus, fetus 2
Exclusion: Pregnancy	035.1XX5	Maternal care for (suspected) chromosomal abnormality in fetus, fetus 5
Exclusion: Pregnancy	035.8XX	
Exclusion: Pregnancy	035.8XX0	Maternal care for other (suspected) fetal abnormality and damage, not applicable or unspecified
Exclusion: Pregnancy	035.8XX5	Maternal care for other (suspected) fetal abnormality and damage, fetus 5
Exclusion: Pregnancy	035.8XX9	Maternal care for other (suspected) fetal abnormality and damage, other fetus
Exclusion: Pregnancy	035.9X	
Exclusion: Pregnancy	035.9XX0	Maternal care for (suspected) fetal abnormality and damage, unspecified, not applicable or unspecified
Exclusion: Pregnancy	035.9XX2	Maternal care for (suspected) fetal abnormality and damage, unspecified, fetus 2
Exclusion: Pregnancy	035.9XX4	Maternal care for (suspected) fetal abnormality and damage, unspecified, fetus 4
Exclusion: Pregnancy	035.9XX5	Maternal care for (suspected) fetal abnormality and damage, unspecified, fetus 5
Exclusion: Pregnancy	035.9XX9	Maternal care for (suspected) fetal abnormality and damage, unspecified, other fetus
Exclusion: Pregnancy	036.0	Maternal care for rhesus isoimmunization
Exclusion: Pregnancy	036.011	Maternal care for anti
Exclusion: Pregnancy	036.0111	Maternal care for anti
Exclusion: Pregnancy	036.0112	Maternal care for anti
Exclusion: Pregnancy	036.0113	Maternal care for anti
Exclusion: Pregnancy	036.0114	Maternal care for anti
Exclusion: Pregnancy	036.0119	Maternal care for anti
Exclusion: Pregnancy	036.012	Maternal care for anti
Exclusion: Pregnancy	036.0120	Maternal care for anti
Exclusion: Pregnancy	036.0123	Maternal care for anti
Exclusion: Pregnancy	036.0125	Maternal care for anti
Exclusion: Pregnancy	036.0129	Maternal care for anti
Exclusion: Pregnancy	036.013	Maternal care for anti
Exclusion: Pregnancy	036.0135	Maternal care for anti
Exclusion: Pregnancy	036.0139	Maternal care for anti
Exclusion: Pregnancy	036.0191	Maternal care for anti
Exclusion: Pregnancy	036.0194	Maternal care for anti
Exclusion: Pregnancy	036.0199	Maternal care for anti
Exclusion: Pregnancy	036.09	Maternal care for other rhesus isoimmunization
Exclusion: Pregnancy	036.0910	Maternal care for other rhesus isoimmunization, first trimester, not applicable or unspecified
Exclusion: Pregnancy	036.0911	Maternal care for other rhesus isoimmunization, first trimester, fetus 1
Exclusion: Pregnancy	036.0912	Maternal care for other rhesus isoimmunization, first trimester, fetus 2
Exclusion: Pregnancy	036.0915	Maternal care for other rhesus isoimmunization, first trimester, fetus 5
Exclusion: Pregnancy	036.0919	Maternal care for other rhesus isoimmunization, first trimester, other fetus
Exclusion: Pregnancy	036.092	Maternal care for other rhesus isoimmunization, second trimester
Exclusion: Pregnancy	036.0922	Maternal care for other rhesus isoimmunization, second trimester, fetus 2
Exclusion: Pregnancy	036.0923	Maternal care for other rhesus isoimmunization, second trimester, fetus 3
Exclusion: Pregnancy	036.0925	Maternal care for other rhesus isoimmunization, second trimester, fetus 5
Exclusion: Pregnancy	036.0929	Maternal care for other rhesus isoimmunization, second trimester, other fetus

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Exclusion: Pregnancy	041.1435	Placentalitis, third trimester, fetus 5
Exclusion: Pregnancy	041.149	Placentalitis, unspecified trimester
Exclusion: Pregnancy	041.1491	Placentalitis, unspecified trimester, fetus 1
Exclusion: Pregnancy	041.1492	Placentalitis, unspecified trimester, fetus 2
Exclusion: Pregnancy	041.1495	Placentalitis, unspecified trimester, fetus 5
Exclusion: Pregnancy	041.1499	Placentalitis, unspecified trimester, other fetus
Exclusion: Pregnancy	041.8X	Other specified disorders of amniotic fluid and membranes
Exclusion: Pregnancy	041.8X1	Other specified disorders of amniotic fluid and membranes, first trimester
Exclusion: Pregnancy	041.8X10	Other specified disorders of amniotic fluid and membranes, first trimester, not applicable or unspecified
Exclusion: Pregnancy	041.8X12	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 2
Exclusion: Pregnancy	041.8X13	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 3
Exclusion: Pregnancy	041.8X14	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 4
Exclusion: Pregnancy	041.8X22	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 2
Exclusion: Pregnancy	041.8X23	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 3
Exclusion: Pregnancy	041.8X24	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 4
Exclusion: Pregnancy	041.8X29	Other specified disorders of amniotic fluid and membranes, second trimester, other fetus
Exclusion: Pregnancy	041.8X39	Other specified disorders of amniotic fluid and membranes, third trimester, other fetus
Exclusion: Pregnancy	041.8X90	Other specified disorders of amniotic fluid and membranes, unspecified trimester, not applicable or unspecified
Exclusion: Pregnancy	041.8X91	Other specified disorders of amniotic fluid and membranes, unspecified trimester, fetus 1
Exclusion: Pregnancy	041.8X94	Other specified disorders of amniotic fluid and membranes, unspecified trimester, fetus 4
Exclusion: Pregnancy	041.8X95	Other specified disorders of amniotic fluid and membranes, unspecified trimester, fetus 5
Exclusion: Pregnancy	041.8X99	Other specified disorders of amniotic fluid and membranes, unspecified trimester, other fetus
Exclusion: Pregnancy	041.9	Disorder of amniotic fluid and membranes, unspecified
Exclusion: Pregnancy	041.90X2	Disorder of amniotic fluid and membranes, unspecified, unspecified trimester, fetus 2
Exclusion: Pregnancy	041.90X4	Disorder of amniotic fluid and membranes, unspecified, unspecified trimester, fetus 4
Exclusion: Pregnancy	041.90X5	Disorder of amniotic fluid and membranes, unspecified, unspecified trimester, fetus 5
Exclusion: Pregnancy	041.90X9	Disorder of amniotic fluid and membranes, unspecified, unspecified trimester, other fetus
Exclusion: Pregnancy	041.91	Disorder of amniotic fluid and membranes, unspecified, first trimester
Exclusion: Pregnancy	041.91X0	Disorder of amniotic fluid and membranes, unspecified, first trimester, not applicable or unspecified
Exclusion: Pregnancy	041.91X1	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 1
Exclusion: Pregnancy	041.91X2	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 2
Exclusion: Pregnancy	041.91X3	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 3
Exclusion: Pregnancy	041.91X4	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 4
Exclusion: Pregnancy	041.91X5	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 5
Exclusion: Pregnancy	041.92X1	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 1
Exclusion: Pregnancy	041.92X2	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 2
Exclusion: Pregnancy	041.92X4	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 4
Exclusion: Pregnancy	042.013	Preterm premature rupture of membranes, onset of labor within 24 hours of rupture, third trimester
Exclusion: Pregnancy	042.019	Preterm premature rupture of membranes, onset of labor within 24 hours of rupture, unspecified trimester
Exclusion: Pregnancy	042.11	Preterm premature rupture of membranes, onset of labor more than 24 hours following rupture
Exclusion: Pregnancy	042.112	Preterm premature rupture of membranes, onset of labor more than 24 hours following rupture, second trimester
Exclusion: Pregnancy	042.12	Full
Exclusion: Pregnancy	042.90	Premature rupture of membranes, unspecified as to length of time between rupture and onset of labor, unspecified weeks of gestation
Exclusion: Pregnancy	042.912	Preterm premature rupture of membranes, unspecified as to length of time between rupture and onset of labor, second trimester
Exclusion: Pregnancy	042.913	Preterm premature rupture of membranes, unspecified as to length of time between rupture and onset of labor, third trimester
Exclusion: Pregnancy	042.92	Full
Exclusion: Pregnancy	043.0	Placental transfusion syndromes
Exclusion: Pregnancy	043.01	Fetomaternal placental transfusion syndrome
Exclusion: Pregnancy	043.011	Fetomaternal placental transfusion syndrome, first trimester
Exclusion: Pregnancy	043.012	Fetomaternal placental transfusion syndrome, second trimester
Exclusion: Pregnancy	043.019	Fetomaternal placental transfusion syndrome, unspecified trimester
Exclusion: Pregnancy	043.021	Fetus
Exclusion: Pregnancy	043.022	Fetus
Exclusion: Pregnancy	043.1	Malformation of placenta
Exclusion: Pregnancy	043.10	Malformation of placenta, unspecified
Exclusion: Pregnancy	043.103	Malformation of placenta, unspecified, third trimester
Exclusion: Pregnancy	043.109	Malformation of placenta, unspecified, unspecified trimester
Exclusion: Pregnancy	043.11	Circumvallate placenta
Exclusion: Pregnancy	043.112	Circumvallate placenta, second trimester
Exclusion: Pregnancy	043.113	Circumvallate placenta, third trimester
Exclusion: Pregnancy	043.119	Circumvallate placenta, unspecified trimester
Exclusion: Pregnancy	043.12	Velamentous insertion of umbilical cord
Exclusion: Pregnancy	043.121	Velamentous insertion of umbilical cord, first trimester
Exclusion: Pregnancy	043.123	Velamentous insertion of umbilical cord, third trimester
Exclusion: Pregnancy	043.129	Velamentous insertion of umbilical cord, unspecified trimester
Exclusion: Pregnancy	043.191	Other malformation of placenta, first trimester
Exclusion: Pregnancy	043.193	Other malformation of placenta, third trimester
Exclusion: Pregnancy	043.199	Other malformation of placenta, unspecified trimester
Exclusion: Pregnancy	043.2	Morbidly adherent placenta
Exclusion: Pregnancy	043.21	Placenta accreta
Exclusion: Pregnancy	043.212	Placenta accreta, second trimester
Exclusion: Pregnancy	043.213	Placenta accreta, third trimester
Exclusion: Pregnancy	043.22	Placenta increta
Exclusion: Pregnancy	043.222	Placenta increta, second trimester
Exclusion: Pregnancy	043.223	Placenta increta, third trimester
Exclusion: Pregnancy	043.23	Placenta percreta
Exclusion: Pregnancy	043.232	Placenta percreta, second trimester
Exclusion: Pregnancy	043.233	Placenta percreta, third trimester
Exclusion: Pregnancy	043.239	Placenta percreta, unspecified trimester
Exclusion: Pregnancy	043.8	Other placental disorders
Exclusion: Pregnancy	043.811	Placental infarction, first trimester
Exclusion: Pregnancy	043.819	Placental infarction, unspecified trimester
Exclusion: Pregnancy	043.89	Other placental disorders
Exclusion: Pregnancy	043.891	Other placental disorders, first trimester
Exclusion: Pregnancy	043.893	Other placental disorders, third trimester
Exclusion: Pregnancy	043.899	Other placental disorders, unspecified trimester
Exclusion: Pregnancy	043.9	Unspecified placental disorder
Exclusion: Pregnancy	043.90	Unspecified placental disorder, unspecified trimester
Exclusion: Pregnancy	043.91	Unspecified placental disorder, first trimester
Exclusion: Pregnancy	043.93	Unspecified placental disorder, third trimester
Exclusion: Pregnancy	044.0	Complete placenta previa NOS or without hemorrhage
Exclusion: Pregnancy	044.01	Complete placenta previa NOS or without hemorrhage, first trimester
Exclusion: Pregnancy	044.1	Complete placenta previa with hemorrhage
Exclusion: Pregnancy	044.12	Complete placenta previa with hemorrhage, second trimester
Exclusion: Pregnancy	044.2	Partial placenta previa without hemorrhage
Exclusion: Pregnancy	044.20	Partial placenta previa NOS or without hemorrhage, unspecified trimester
Exclusion: Pregnancy	044.22	Partial placenta previa NOS or without hemorrhage, second trimester
Exclusion: Pregnancy	044.23	Partial placenta previa NOS or without hemorrhage, third trimester
Exclusion: Pregnancy	044.30	Partial placenta previa with hemorrhage, unspecified trimester
Exclusion: Pregnancy	044.32	Partial placenta previa with hemorrhage, second trimester
Exclusion: Pregnancy	044.33	Partial placenta previa with hemorrhage, third trimester
Exclusion: Pregnancy	044.50	Low lying placenta with hemorrhage, unspecified trimester
Exclusion: Pregnancy	044.51	Low lying placenta with hemorrhage, first trimester
Exclusion: Pregnancy	044.52	Low lying placenta with hemorrhage, second trimester
Exclusion: Pregnancy	045	Premature separation of placenta [abruptio placentae]
Exclusion: Pregnancy	045.001	Premature separation of placenta with coagulation defect, unspecified, first trimester
Exclusion: Pregnancy	045.002	Premature separation of placenta with coagulation defect, unspecified, second trimester
Exclusion: Pregnancy	045.003	Premature separation of placenta with coagulation defect, unspecified, third trimester

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Exclusion: Pregnancy	045.011	Premature separation of placenta with afibrinogenemia, first trimester
Exclusion: Pregnancy	045.012	Premature separation of placenta with afibrinogenemia, second trimester
Exclusion: Pregnancy	045.019	Premature separation of placenta with afibrinogenemia, unspecified trimester
Exclusion: Pregnancy	045.02	Premature separation of placenta with disseminated intravascular coagulation
Exclusion: Pregnancy	045.022	Premature separation of placenta with disseminated intravascular coagulation, second trimester
Exclusion: Pregnancy	045.023	Premature separation of placenta with disseminated intravascular coagulation, third trimester
Exclusion: Pregnancy	045.09	Premature separation of placenta with other coagulation defect
Exclusion: Pregnancy	045.091	Premature separation of placenta with other coagulation defect, first trimester
Exclusion: Pregnancy	045.093	Premature separation of placenta with other coagulation defect, third trimester
Exclusion: Pregnancy	045.8	Other premature separation of placenta
Exclusion: Pregnancy	045.8X1	Other premature separation of placenta, first trimester
Exclusion: Pregnancy	045.8X2	Other premature separation of placenta, second trimester
Exclusion: Pregnancy	045.8X3	Other premature separation of placenta, third trimester
Exclusion: Pregnancy	045.9	Premature separation of placenta, unspecified
Exclusion: Pregnancy	045.90	Premature separation of placenta, unspecified, unspecified trimester
Exclusion: Pregnancy	046.002	Antepartum hemorrhage with coagulation defect, unspecified, second trimester
Exclusion: Pregnancy	046.003	Antepartum hemorrhage with coagulation defect, unspecified, third trimester
Exclusion: Pregnancy	046.01	Antepartum hemorrhage with afibrinogenemia
Exclusion: Pregnancy	046.012	Antepartum hemorrhage with afibrinogenemia, second trimester
Exclusion: Pregnancy	046.021	Antepartum hemorrhage with disseminated intravascular coagulation, first trimester
Exclusion: Pregnancy	046.022	Antepartum hemorrhage with disseminated intravascular coagulation, second trimester
Exclusion: Pregnancy	046.023	Antepartum hemorrhage with disseminated intravascular coagulation, third trimester
Exclusion: Pregnancy	046.09	Antepartum hemorrhage with other coagulation defect
Exclusion: Pregnancy	046.091	Antepartum hemorrhage with other coagulation defect, first trimester
Exclusion: Pregnancy	046.092	Antepartum hemorrhage with other coagulation defect, second trimester
Exclusion: Pregnancy	046.099	Antepartum hemorrhage with other coagulation defect, unspecified trimester
Exclusion: Pregnancy	046.8	Other antepartum hemorrhage
Exclusion: Pregnancy	046.8X	Other antepartum hemorrhage
Exclusion: Pregnancy	046.8X1	Other antepartum hemorrhage, first trimester
Exclusion: Pregnancy	046.8X3	Other antepartum hemorrhage, third trimester
Exclusion: Pregnancy	046.8X9	Other antepartum hemorrhage, unspecified trimester
Exclusion: Pregnancy	046.9	Antepartum hemorrhage, unspecified
Exclusion: Pregnancy	046.90	Antepartum hemorrhage, unspecified, unspecified trimester
Exclusion: Pregnancy	047	False labor
Exclusion: Pregnancy	047.00	False labor before 37 completed weeks of gestation, unspecified trimester
Exclusion: Pregnancy	047.02	False labor before 37 completed weeks of gestation, second trimester
Exclusion: Pregnancy	047.03	False labor before 37 completed weeks of gestation, third trimester
Exclusion: Pregnancy	048	Late pregnancy
Exclusion: Pregnancy	060.0	Preterm labor without delivery
Exclusion: Pregnancy	060.02	Preterm labor without delivery, second trimester
Exclusion: Pregnancy	060.03	Preterm labor without delivery, third trimester
Exclusion: Pregnancy	060.1	Preterm labor with preterm delivery
Exclusion: Pregnancy	060.10X2	Preterm labor with preterm delivery, unspecified trimester, fetus 2
Exclusion: Pregnancy	060.10X3	Preterm labor with preterm delivery, unspecified trimester, fetus 3
Exclusion: Pregnancy	060.10X4	Preterm labor with preterm delivery, unspecified trimester, fetus 4
Exclusion: Pregnancy	060.10X5	Preterm labor with preterm delivery, unspecified trimester, fetus 5
Exclusion: Pregnancy	060.12X0	Preterm labor second trimester with preterm delivery second trimester, not applicable or unspecified
Exclusion: Pregnancy	060.12X2	Preterm labor second trimester with preterm delivery second trimester, fetus 2
Exclusion: Pregnancy	060.12X4	Preterm labor second trimester with preterm delivery second trimester, fetus 4
Exclusion: Pregnancy	060.12X5	Preterm labor second trimester with preterm delivery second trimester, fetus 5
Exclusion: Pregnancy	060.13X	
Exclusion: Pregnancy	060.13X0	Preterm labor second trimester with preterm delivery third trimester, not applicable or unspecified
Exclusion: Pregnancy	060.13X2	Preterm labor second trimester with preterm delivery third trimester, fetus 2
Exclusion: Pregnancy	060.13X3	Preterm labor second trimester with preterm delivery third trimester, fetus 3
Exclusion: Pregnancy	060.13X5	Preterm labor second trimester with preterm delivery third trimester, fetus 5
Exclusion: Pregnancy	060.14X	
Exclusion: Pregnancy	060.14X3	Preterm labor third trimester with preterm delivery third trimester, fetus 3
Exclusion: Pregnancy	060.14X5	Preterm labor third trimester with preterm delivery third trimester, fetus 5
Exclusion: Pregnancy	060.14X9	Preterm labor third trimester with preterm delivery third trimester, other fetus
Exclusion: Pregnancy	061.1	Failed instrumental induction of labor
Exclusion: Pregnancy	071.0	Rupture of uterus (spontaneous) before onset of labor
Exclusion: Pregnancy	071.00	Rupture of uterus before onset of labor, unspecified trimester
Exclusion: Pregnancy	072.3	Postpartum coagulation defects
Exclusion: Pregnancy	073.1	Retained portions of placenta and membranes, without hemorrhage
Exclusion: Pregnancy	075	Other complications of labor and delivery, not elsewhere classified
Exclusion: Pregnancy	075.0	Maternal distress during labor and delivery
Exclusion: Pregnancy	075.2	Pyrexia during labor, not elsewhere classified
Exclusion: Pregnancy	075.4	Other complications of obstetric surgery and procedures
Exclusion: Pregnancy	075.5	Delayed delivery after artificial rupture of membranes
Exclusion: Pregnancy	075.8	Other specified complications of labor and delivery
Exclusion: Pregnancy	098	Maternal infectious and parasitic diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	098.01	Tuberculosis complicating pregnancy
Exclusion: Pregnancy	098.011	Tuberculosis complicating pregnancy, first trimester
Exclusion: Pregnancy	098.012	Tuberculosis complicating pregnancy, second trimester
Exclusion: Pregnancy	098.02	Tuberculosis complicating childbirth
Exclusion: Pregnancy	098.03	Tuberculosis complicating the puerperium
Exclusion: Pregnancy	098.1	Syphilis complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	098.11	Syphilis complicating pregnancy
Exclusion: Pregnancy	098.111	Syphilis complicating pregnancy, first trimester
Exclusion: Pregnancy	098.119	Syphilis complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	098.12	Syphilis complicating childbirth
Exclusion: Pregnancy	098.13	Syphilis complicating the puerperium
Exclusion: Pregnancy	098.21	Gonorrhea complicating pregnancy
Exclusion: Pregnancy	098.219	Gonorrhea complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	098.23	Gonorrhea complicating the puerperium
Exclusion: Pregnancy	098.31	Other infections with a predominantly sexual mode of transmission complicating pregnancy
Exclusion: Pregnancy	098.311	Other infections with a predominantly sexual mode of transmission complicating pregnancy, first trimester
Exclusion: Pregnancy	098.312	Other infections with a predominantly sexual mode of transmission complicating pregnancy, second trimester
Exclusion: Pregnancy	098.313	Other infections with a predominantly sexual mode of transmission complicating pregnancy, third trimester
Exclusion: Pregnancy	098.319	Other infections with a predominantly sexual mode of transmission complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	098.4	Viral hepatitis complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	098.41	Viral hepatitis complicating pregnancy
Exclusion: Pregnancy	098.411	Viral hepatitis complicating pregnancy, first trimester
Exclusion: Pregnancy	098.419	Viral hepatitis complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	098.512	Other viral diseases complicating pregnancy, second trimester
Exclusion: Pregnancy	098.6	Protozoal diseases complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	098.61	Protozoal diseases complicating pregnancy
Exclusion: Pregnancy	098.611	Protozoal diseases complicating pregnancy, first trimester
Exclusion: Pregnancy	098.612	Protozoal diseases complicating pregnancy, second trimester
Exclusion: Pregnancy	098.613	Protozoal diseases complicating pregnancy, third trimester
Exclusion: Pregnancy	098.62	Protozoal diseases complicating childbirth
Exclusion: Pregnancy	098.63	Protozoal diseases complicating the puerperium
Exclusion: Pregnancy	098.7	Human immunodeficiency virus [HIV] disease complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	098.71	Human immunodeficiency virus [HIV] disease complicating pregnancy
Exclusion: Pregnancy	098.711	Human immunodeficiency virus [HIV] disease complicating pregnancy, first trimester
Exclusion: Pregnancy	098.712	Human immunodeficiency virus [HIV] disease complicating pregnancy, second trimester
Exclusion: Pregnancy	098.713	Human immunodeficiency virus [HIV] disease complicating pregnancy, third trimester
Exclusion: Pregnancy	098.719	Human immunodeficiency virus [HIV] disease complicating pregnancy, unspecified trimester

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Exclusion: Pregnancy	098.72	Human immunodeficiency virus [HIV] disease complicating childbirth
Exclusion: Pregnancy	098.73	Human immunodeficiency virus [HIV] disease complicating the puerperium
Exclusion: Pregnancy	098.811	Other maternal infectious and parasitic diseases complicating pregnancy, first trimester
Exclusion: Pregnancy	098.812	Other maternal infectious and parasitic diseases complicating pregnancy, second trimester
Exclusion: Pregnancy	098.813	Other maternal infectious and parasitic diseases complicating pregnancy, third trimester
Exclusion: Pregnancy	098.911	Unspecified maternal infectious and parasitic disease complicating pregnancy, first trimester
Exclusion: Pregnancy	098.912	Unspecified maternal infectious and parasitic disease complicating pregnancy, second trimester
Exclusion: Pregnancy	098.913	Unspecified maternal infectious and parasitic disease complicating pregnancy, third trimester
Exclusion: Pregnancy	098.919	Unspecified maternal infectious and parasitic disease complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	098.93	Unspecified maternal infectious and parasitic disease complicating the puerperium
Exclusion: Pregnancy	099.0	Anemia complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	099.01	Anemia complicating pregnancy
Exclusion: Pregnancy	099.011	Anemia complicating pregnancy, first trimester
Exclusion: Pregnancy	099.013	Anemia complicating pregnancy, third trimester
Exclusion: Pregnancy	099.02	Anemia complicating childbirth
Exclusion: Pregnancy	099.03	Anemia complicating the puerperium
Exclusion: Pregnancy	099.11	Other diseases of the blood and blood
Exclusion: Pregnancy	099.111	Other diseases of the blood and blood
Exclusion: Pregnancy	099.12	Other diseases of the blood and blood
Exclusion: Pregnancy	099.13	Other diseases of the blood and blood
Exclusion: Pregnancy	099.21	Obesity complicating pregnancy, childbirth, and the puerperium
Exclusion: Pregnancy	099.210	Obesity complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	099.211	Obesity complicating pregnancy, first trimester
Exclusion: Pregnancy	099.212	Obesity complicating pregnancy, second trimester
Exclusion: Pregnancy	099.214	Obesity complicating childbirth
Exclusion: Pregnancy	099.280	Endocrine, nutritional and metabolic diseases complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	099.283	Endocrine, nutritional and metabolic diseases complicating pregnancy, third trimester
Exclusion: Pregnancy	099.284	Endocrine, nutritional and metabolic diseases complicating childbirth
Exclusion: Pregnancy	099.310	Alcohol use complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	099.311	Alcohol use complicating pregnancy, first trimester
Exclusion: Pregnancy	099.312	Alcohol use complicating pregnancy, second trimester
Exclusion: Pregnancy	099.320	Drug use complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	099.322	Drug use complicating pregnancy, second trimester
Exclusion: Pregnancy	099.324	Drug use complicating childbirth
Exclusion: Pregnancy	099.325	Drug use complicating the puerperium
Exclusion: Pregnancy	099.330	Smoking (tobacco) complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	099.335	Smoking (tobacco) complicating the puerperium
Exclusion: Pregnancy	099.34	Other mental disorders complicating pregnancy, childbirth, and the puerperium
Exclusion: Pregnancy	099.343	Other mental disorders complicating pregnancy, third trimester
Exclusion: Pregnancy	099.345	Other mental disorders complicating the puerperium
Exclusion: Pregnancy	099.353	Diseases of the nervous system complicating pregnancy, third trimester
Exclusion: Pregnancy	099.4	Diseases of the circulatory system complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	099.41	Diseases of the circulatory system complicating pregnancy
Exclusion: Pregnancy	099.411	Diseases of the circulatory system complicating pregnancy, first trimester
Exclusion: Pregnancy	099.413	Diseases of the circulatory system complicating pregnancy, third trimester
Exclusion: Pregnancy	099.51	Diseases of the respiratory system complicating pregnancy
Exclusion: Pregnancy	099.519	Diseases of the respiratory system complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	099.52	Diseases of the respiratory system complicating childbirth
Exclusion: Pregnancy	099.53	Diseases of the respiratory system complicating the puerperium
Exclusion: Pregnancy	099.6	Diseases of the digestive system complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	099.61	Diseases of the digestive system complicating pregnancy
Exclusion: Pregnancy	099.612	Diseases of the digestive system complicating pregnancy, second trimester
Exclusion: Pregnancy	099.62	Diseases of the digestive system complicating childbirth
Exclusion: Pregnancy	099.63	Diseases of the digestive system complicating the puerperium
Exclusion: Pregnancy	099.71	Diseases of the skin and subcutaneous tissue complicating pregnancy
Exclusion: Pregnancy	099.712	Diseases of the skin and subcutaneous tissue complicating pregnancy, second trimester
Exclusion: Pregnancy	099.713	Diseases of the skin and subcutaneous tissue complicating pregnancy, third trimester
Exclusion: Pregnancy	099.72	Diseases of the skin and subcutaneous tissue complicating childbirth
Exclusion: Pregnancy	099.815	Abnormal glucose complicating the puerperium
Exclusion: Pregnancy	099.82	Streptococcus B carrier state complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	099.824	Streptococcus B carrier state complicating childbirth
Exclusion: Pregnancy	099.825	Streptococcus B carrier state complicating the puerperium
Exclusion: Pregnancy	099.83	Other infection carrier state complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	099.830	Other infection carrier state complicating pregnancy
Exclusion: Pregnancy	099.834	Other infection carrier state complicating childbirth
Exclusion: Pregnancy	099.84	Bariatric surgery status complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	099.841	Bariatric surgery status complicating pregnancy, first trimester
Exclusion: Pregnancy	099.844	Bariatric surgery status complicating childbirth
Exclusion: Pregnancy	099.845	Bariatric surgery status complicating the puerperium
Exclusion: Pregnancy	09A.111	Malignant neoplasm complicating pregnancy, first trimester
Exclusion: Pregnancy	09A.112	Malignant neoplasm complicating pregnancy, second trimester
Exclusion: Pregnancy	09A.113	Malignant neoplasm complicating pregnancy, third trimester
Exclusion: Pregnancy	09A.119	Malignant neoplasm complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	09A.212	Injury, poisoning and certain other consequences of external causes complicating pregnancy, second trimester
Exclusion: Pregnancy	09A.213	Injury, poisoning and certain other consequences of external causes complicating pregnancy, third trimester
Exclusion: Pregnancy	09A.22	Injury, poisoning and certain other consequences of external causes complicating childbirth
Exclusion: Pregnancy	09A.3	Physical abuse complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	09A.311	Physical abuse complicating pregnancy, first trimester
Exclusion: Pregnancy	09A.313	Physical abuse complicating pregnancy, third trimester
Exclusion: Pregnancy	09A.319	Physical abuse complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	09A.32	Physical abuse complicating childbirth
Exclusion: Pregnancy	09A.33	Physical abuse complicating the puerperium
Exclusion: Pregnancy	09A.41	Sexual abuse complicating pregnancy
Exclusion: Pregnancy	09A.411	Sexual abuse complicating pregnancy, first trimester
Exclusion: Pregnancy	09A.412	Sexual abuse complicating pregnancy, second trimester
Exclusion: Pregnancy	09A.42	Sexual abuse complicating childbirth
Exclusion: Pregnancy	09A.51	Psychological abuse complicating pregnancy
Exclusion: Pregnancy	09A.52	Psychological abuse complicating childbirth
Exclusion: Pregnancy	P05.02	Newborn light for gestational age, 500
Exclusion: Pregnancy	P05.04	Newborn light for gestational age, 1000
Exclusion: Pregnancy	P05.06	Newborn light for gestational age, 1500
Exclusion: Pregnancy	P05.12	Newborn small for gestational age, 500
Exclusion: Pregnancy	P05.15	Newborn small for gestational age, 1250
Exclusion: Pregnancy	P05.16	Newborn small for gestational age, 1500
Exclusion: Pregnancy	P07.2	Extreme immaturity of newborn
Exclusion: Pregnancy	P07.22	Extreme immaturity of newborn, gestational age 23 completed weeks
Exclusion: Pregnancy	P07.24	Extreme immaturity of newborn, gestational age 25 completed weeks
Exclusion: Pregnancy	P07.3	Preterm [premature] newborn [other]
Exclusion: Pregnancy	P07.31	Preterm newborn, gestational age 28 completed weeks
Exclusion: Pregnancy	P07.32	Preterm newborn, gestational age 29 completed weeks
Exclusion: Pregnancy	P07.34	Preterm newborn, gestational age 31 completed weeks
Exclusion: Pregnancy	P07.35	Preterm newborn, gestational age 32 completed weeks
Exclusion: Pregnancy	P07.38	Preterm newborn, gestational age 35 completed weeks
Exclusion: Pregnancy	P08.2	Late newborn, not heavy for gestational age
Exclusion: Pregnancy	P08.21	Post
Exclusion: Pregnancy	Z32.01	Encounter for pregnancy test, result positive
Exclusion: Pregnancy	Z33.2	Encounter for elective termination of pregnancy
Exclusion: Pregnancy	Z33.3	Pregnant state, gestational carrier

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Exclusion: Pregnancy	Z34	Encounter for supervision of normal pregnancy
Exclusion: Pregnancy	Z34.0	Encounter for supervision of normal first pregnancy
Exclusion: Pregnancy	Z34.01	Encounter for supervision of normal first pregnancy, first trimester
Exclusion: Pregnancy	Z34.02	Encounter for supervision of normal first pregnancy, second trimester
Exclusion: Pregnancy	Z34.80	Encounter for supervision of other normal pregnancy, unspecified trimester
Exclusion: Pregnancy	Z34.83	Encounter for supervision of other normal pregnancy, third trimester
Exclusion: Pregnancy	Z34.9	Encounter for supervision of normal pregnancy, unspecified
Exclusion: Pregnancy	Z34.91	Encounter for supervision of normal pregnancy, unspecified, first trimester
Exclusion: Pregnancy	Z34.92	Encounter for supervision of normal pregnancy, unspecified, second trimester
Exclusion: Pregnancy	Z36.4	Encounter for antenatal screening for fetal growth retardation
Exclusion: Pregnancy	Z36.5	Encounter for antenatal screening for isoimmunization
Exclusion: Pregnancy	Z36.8	Encounter for other antenatal screening
Exclusion: Pregnancy	Z36.82	Encounter for antenatal screening for nuchal translucency
Exclusion: Pregnancy	Z36.83	Encounter for fetal screening for congenital cardiac abnormalities
Exclusion: Pregnancy	Z36.84	Encounter for antenatal screening for fetal lung maturity
Exclusion: Pregnancy	Z36.85	Encounter for antenatal screening for Streptococcus B
Exclusion: Pregnancy	Z36.88	Encounter for antenatal screening for fetal macrosomia
Exclusion: Pregnancy	Z37.3	Twins, one liveborn and one stillborn
Exclusion: Pregnancy	Z37.50	Multiple births, unspecified, all liveborn
Exclusion: Pregnancy	Z37.59	Other multiple births, all liveborn
Exclusion: Pregnancy	Z37.62	Quadruplets, some liveborn
Exclusion: Pregnancy	Z37.63	Quintuplets, some liveborn
Exclusion: Pregnancy	Z37.64	Sextuplets, some liveborn
Exclusion: Pregnancy	Z38.3	Twin liveborn infant, born in hospital
Exclusion: Pregnancy	Z38.31	Twin liveborn infant, delivered by cesarean
Exclusion: Pregnancy	Z38.4	Twin liveborn infant, born outside hospital
Exclusion: Pregnancy	Z38.6	Other multiple liveborn infant, born in hospital
Exclusion: Pregnancy	Z38.62	Triplet liveborn infant, delivered by cesarean
Exclusion: Pregnancy	Z38.64	Quadruplet liveborn infant, delivered by cesarean
Exclusion: Pregnancy	Z38.65	Quintuplet liveborn infant, delivered vaginally
Exclusion: Pregnancy	Z38.66	Quintuplet liveborn infant, delivered by cesarean
Exclusion: Pregnancy	Z38.69	Other multiple liveborn infant, delivered by cesarean
Exclusion: Pregnancy	Z38.7	Other multiple liveborn infant, born outside hospital
Exclusion: Pregnancy	Z39.2	Encounter for routine postpartum follow
Exclusion: Pregnancy	Z3A.00	Weeks of gestation of pregnancy not specified
Exclusion: Pregnancy	Z3A.08	8 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.09	9 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.1	Weeks of gestation of pregnancy, weeks 10
Exclusion: Pregnancy	Z3A.11	11 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.14	14 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.16	16 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.2	Weeks of gestation of pregnancy, weeks 20
Exclusion: Pregnancy	Z3A.21	21 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.22	22 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.24	24 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.26	26 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.27	27 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.28	28 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.3	Weeks of gestation of pregnancy, weeks 30
Exclusion: Pregnancy	Z3A.31	31 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.33	33 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.37	37 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.39	39 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.4	Weeks of gestation of pregnancy, weeks 40 or greater
Exclusion: Pregnancy	Z3A.42	42 weeks gestation of pregnancy
Exclusion: Pregnancy	H35.1	Retinopathy of prematurity
Exclusion: Pregnancy	H35.10	Retinopathy of prematurity, unspecified
Exclusion: Pregnancy	H35.102	Retinopathy of prematurity, unspecified, left eye
Exclusion: Pregnancy	H35.109	Retinopathy of prematurity, unspecified, unspecified eye
Exclusion: Pregnancy	H35.112	Retinopathy of prematurity, stage 0, left eye
Exclusion: Pregnancy	H35.119	Retinopathy of prematurity, stage 0, unspecified eye
Exclusion: Pregnancy	H35.12	Retinopathy of prematurity, stage 1
Exclusion: Pregnancy	H35.121	Retinopathy of prematurity, stage 1, right eye
Exclusion: Pregnancy	H35.129	Retinopathy of prematurity, stage 1, unspecified eye
Exclusion: Pregnancy	H35.131	Retinopathy of prematurity, stage 2, right eye
Exclusion: Pregnancy	H35.132	Retinopathy of prematurity, stage 2, left eye
Exclusion: Pregnancy	H35.139	Retinopathy of prematurity, stage 2, unspecified eye
Exclusion: Pregnancy	H35.143	Retinopathy of prematurity, stage 3, bilateral
Exclusion: Pregnancy	H35.149	Retinopathy of prematurity, stage 3, unspecified eye
Exclusion: Pregnancy	H35.151	Retinopathy of prematurity, stage 4, right eye
Exclusion: Pregnancy	H35.152	Retinopathy of prematurity, stage 4, left eye
Exclusion: Pregnancy	H35.162	Retinopathy of prematurity, stage 5, left eye
Exclusion: Pregnancy	H35.171	Retrolental fibroplasia, right eye
Exclusion: Pregnancy	H35.173	Retrolental fibroplasia, bilateral
Exclusion: Pregnancy	000	Ectopic pregnancy
Exclusion: Pregnancy	000.0	Abdominal pregnancy
Exclusion: Pregnancy	000.00	Abdominal pregnancy without intrauterine pregnancy
Exclusion: Pregnancy	000.01	Abdominal pregnancy with intrauterine pregnancy
Exclusion: Pregnancy	000.101	Right tubal pregnancy without intrauterine pregnancy
Exclusion: Pregnancy	000.109	Unspecified tubal pregnancy without intrauterine pregnancy
Exclusion: Pregnancy	000.11	Tubal pregnancy with intrauterine pregnancy
Exclusion: Pregnancy	000.111	Right tubal pregnancy with intrauterine pregnancy
Exclusion: Pregnancy	000.112	Left tubal pregnancy with intrauterine pregnancy
Exclusion: Pregnancy	000.2	Ovarian pregnancy
Exclusion: Pregnancy	000.20	Ovarian pregnancy without intrauterine pregnancy
Exclusion: Pregnancy	000.202	Left ovarian pregnancy without intrauterine pregnancy
Exclusion: Pregnancy	000.21	Ovarian pregnancy with intrauterine pregnancy
Exclusion: Pregnancy	000.211	Right ovarian pregnancy with intrauterine pregnancy
Exclusion: Pregnancy	000.219	Unspecified ovarian pregnancy with intrauterine pregnancy
Exclusion: Pregnancy	000.8	Other ectopic pregnancy
Exclusion: Pregnancy	000.80	Other ectopic pregnancy without intrauterine pregnancy
Exclusion: Pregnancy	000.81	Other ectopic pregnancy with intrauterine pregnancy
Exclusion: Pregnancy	000.9	Ectopic pregnancy, unspecified
Exclusion: Pregnancy	000.91	Unspecified ectopic pregnancy with intrauterine pregnancy
Exclusion: Pregnancy	001.1	Incomplete and partial hydatidiform mole
Exclusion: Pregnancy	001.9	Hydatidiform mole, unspecified
Exclusion: Pregnancy	002.0	Blighted ovum and nonhydatidiform mole
Exclusion: Pregnancy	002.8	Other specified abnormal products of conception
Exclusion: Pregnancy	002.9	Abnormal product of conception, unspecified
Exclusion: Pregnancy	003.1	Delayed or excessive hemorrhage following incomplete spontaneous abortion
Exclusion: Pregnancy	003.2	Embolism following incomplete spontaneous abortion
Exclusion: Pregnancy	003.3	Other and unspecified complications following incomplete spontaneous abortion
Exclusion: Pregnancy	003.31	Shock following incomplete spontaneous abortion
Exclusion: Pregnancy	003.32	Renal failure following incomplete spontaneous abortion
Exclusion: Pregnancy	003.36	Cardiac arrest following incomplete spontaneous abortion
Exclusion: Pregnancy	003.37	Sepsis following incomplete spontaneous abortion
Exclusion: Pregnancy	003.39	Incomplete spontaneous abortion with other complications
Exclusion: Pregnancy	003.5	Genital tract and pelvic infection following complete or unspecified spontaneous abortion

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Exclusion: Pregnancy	003.6	Delayed or excessive hemorrhage following complete or unspecified spontaneous abortion
Exclusion: Pregnancy	003.7	Embolism following complete or unspecified spontaneous abortion
Exclusion: Pregnancy	003.8	Other and unspecified complications following complete or unspecified spontaneous abortion
Exclusion: Pregnancy	003.80	Unspecified complication following complete or unspecified spontaneous abortion
Exclusion: Pregnancy	003.81	Shock following complete or unspecified spontaneous abortion
Exclusion: Pregnancy	003.82	Renal failure following complete or unspecified spontaneous abortion
Exclusion: Pregnancy	003.83	Metabolic disorder following complete or unspecified spontaneous abortion
Exclusion: Pregnancy	003.84	Damage to pelvic organs following complete or unspecified spontaneous abortion
Exclusion: Pregnancy	003.85	Other venous complications following complete or unspecified spontaneous abortion
Exclusion: Pregnancy	003.86	Cardiac arrest following complete or unspecified spontaneous abortion
Exclusion: Pregnancy	003.89	Complete or unspecified spontaneous abortion with other complications
Exclusion: Pregnancy	003.9	Complete or unspecified spontaneous abortion without complication
Exclusion: Pregnancy	004.5	Genital tract and pelvic infection following (induced) termination of pregnancy
Exclusion: Pregnancy	004.8	(Induced) termination of pregnancy with other and unspecified complications
Exclusion: Pregnancy	004.80	(Induced) termination of pregnancy with unspecified complications
Exclusion: Pregnancy	004.81	Shock following (induced) termination of pregnancy
Exclusion: Pregnancy	004.85	Other venous complications following (induced) termination of pregnancy
Exclusion: Pregnancy	004.86	Cardiac arrest following (induced) termination of pregnancy
Exclusion: Pregnancy	007	Failed attempted termination of pregnancy
Exclusion: Pregnancy	007.2	Embolism following failed attempted termination of pregnancy
Exclusion: Pregnancy	007.3	Failed attempted termination of pregnancy with other and unspecified complications
Exclusion: Pregnancy	007.31	Shock following failed attempted termination of pregnancy
Exclusion: Pregnancy	007.35	Other venous complications following failed attempted termination of pregnancy
Exclusion: Pregnancy	007.36	Cardiac arrest following failed attempted termination of pregnancy
Exclusion: Pregnancy	007.39	Failed attempted termination of pregnancy with other complications
Exclusion: Pregnancy	008.0	Genital tract and pelvic infection following ectopic and molar pregnancy
Exclusion: Pregnancy	008.1	Delayed or excessive hemorrhage following ectopic and molar pregnancy
Exclusion: Pregnancy	008.2	Embolism following ectopic and molar pregnancy
Exclusion: Pregnancy	008.5	Metabolic disorders following an ectopic and molar pregnancy
Exclusion: Pregnancy	008.7	Other venous complications following an ectopic and molar pregnancy
Exclusion: Pregnancy	008.81	Cardiac arrest following an ectopic and molar pregnancy
Exclusion: Pregnancy	008.89	Other complications following an ectopic and molar pregnancy
Exclusion: Pregnancy	009	Supervision of high risk pregnancy
Exclusion: Pregnancy	009.00	Supervision of pregnancy with history of infertility, unspecified trimester
Exclusion: Pregnancy	009.02	Supervision of pregnancy with history of infertility, second trimester
Exclusion: Pregnancy	009.03	Supervision of pregnancy with history of infertility, third trimester
Exclusion: Pregnancy	009.10	Supervision of pregnancy with history of ectopic pregnancy, unspecified trimester
Exclusion: Pregnancy	009.12	Supervision of pregnancy with history of ectopic pregnancy, second trimester
Exclusion: Pregnancy	009.212	Supervision of pregnancy with history of pre
Exclusion: Pregnancy	009.213	Supervision of pregnancy with history of pre
Exclusion: Pregnancy	009.219	Supervision of pregnancy with history of pre
Exclusion: Pregnancy	009.29	Supervision of pregnancy with other poor reproductive or obstetric history
Exclusion: Pregnancy	009.292	Supervision of pregnancy with other poor reproductive or obstetric history, second trimester
Exclusion: Pregnancy	009.293	Supervision of pregnancy with other poor reproductive or obstetric history, third trimester
Exclusion: Pregnancy	009.30	Supervision of pregnancy with insufficient antenatal care, unspecified trimester
Exclusion: Pregnancy	009.4	Supervision of pregnancy with grand multiparity
Exclusion: Pregnancy	009.42	Supervision of pregnancy with grand multiparity, second trimester
Exclusion: Pregnancy	009.43	Supervision of pregnancy with grand multiparity, third trimester
Exclusion: Pregnancy	009.51	Supervision of elderly primigravida
Exclusion: Pregnancy	009.512	Supervision of elderly primigravida, second trimester
Exclusion: Pregnancy	009.52	Supervision of elderly multigravida
Exclusion: Pregnancy	009.521	Supervision of elderly multigravida, first trimester
Exclusion: Pregnancy	009.522	Supervision of elderly multigravida, second trimester
Exclusion: Pregnancy	009.529	Supervision of elderly multigravida, unspecified trimester
Exclusion: Pregnancy	009.613	Supervision of young primigravida, third trimester
Exclusion: Pregnancy	009.619	Supervision of young primigravida, unspecified trimester
Exclusion: Pregnancy	009.62	Supervision of young multigravida
Exclusion: Pregnancy	009.621	Supervision of young multigravida, first trimester
Exclusion: Pregnancy	009.7	Supervision of high risk pregnancy due to social problems
Exclusion: Pregnancy	009.70	Supervision of high risk pregnancy due to social problems, unspecified trimester
Exclusion: Pregnancy	009.8	Supervision of other high risk pregnancies
Exclusion: Pregnancy	009.812	Supervision of pregnancy resulting from assisted reproductive technology, second trimester
Exclusion: Pregnancy	009.813	Supervision of pregnancy resulting from assisted reproductive technology, third trimester
Exclusion: Pregnancy	009.819	Supervision of pregnancy resulting from assisted reproductive technology, unspecified trimester
Exclusion: Pregnancy	009.82	Supervision of pregnancy with history of in utero procedure during previous pregnancy
Exclusion: Pregnancy	009.821	Supervision of pregnancy with history of in utero procedure during previous pregnancy, first trimester
Exclusion: Pregnancy	009.89	Supervision of other high risk pregnancies
Exclusion: Pregnancy	009.892	Supervision of other high risk pregnancies, second trimester
Exclusion: Pregnancy	009.893	Supervision of other high risk pregnancies, third trimester
Exclusion: Pregnancy	009.899	Supervision of other high risk pregnancies, unspecified trimester
Exclusion: Pregnancy	009.9	Supervision of high risk pregnancy, unspecified
Exclusion: Pregnancy	009.90	Supervision of high risk pregnancy, unspecified, unspecified trimester
Exclusion: Pregnancy	009.A	Supervision of pregnancy with history of molar pregnancy
Exclusion: Pregnancy	009.A0	Supervision of pregnancy with history of molar pregnancy, unspecified trimester
Exclusion: Pregnancy	009.A2	Supervision of pregnancy with history of molar pregnancy, second trimester
Exclusion: Pregnancy	009.A3	Supervision of pregnancy with history of molar pregnancy, third trimester
Exclusion: Pregnancy	010	Pre
Exclusion: Pregnancy	010.0	Pre
Exclusion: Pregnancy	010.01	Pre
Exclusion: Pregnancy	010.02	Pre
Exclusion: Pregnancy	010.03	Pre
Exclusion: Pregnancy	010.11	Pre
Exclusion: Pregnancy	010.111	Pre
Exclusion: Pregnancy	010.113	Pre
Exclusion: Pregnancy	010.13	Pre
Exclusion: Pregnancy	010.2	Pre
Exclusion: Pregnancy	010.21	Pre
Exclusion: Pregnancy	010.211	Pre
Exclusion: Pregnancy	010.212	Pre
Exclusion: Pregnancy	010.213	Pre
Exclusion: Pregnancy	010.22	Pre
Exclusion: Pregnancy	010.3	Pre
Exclusion: Pregnancy	010.311	Pre
Exclusion: Pregnancy	010.312	Pre
Exclusion: Pregnancy	010.32	Pre
Exclusion: Pregnancy	010.4	Pre
Exclusion: Pregnancy	010.41	Pre
Exclusion: Pregnancy	010.419	Pre
Exclusion: Pregnancy	010.43	Pre
Exclusion: Pregnancy	010.9	Unspecified pre
Exclusion: Pregnancy	010.912	Unspecified pre
Exclusion: Pregnancy	010.919	Unspecified pre
Exclusion: Pregnancy	010.92	Unspecified pre
Exclusion: Pregnancy	010.93	Unspecified pre
Exclusion: Pregnancy	011.2	Pre
Exclusion: Pregnancy	012.00	Gestational edema, unspecified trimester
Exclusion: Pregnancy	012.02	Gestational edema, second trimester
Exclusion: Pregnancy	012.04	Gestational edema, complicating childbirth

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Exclusion: Pregnancy	O12.1	Gestational proteinuria
Exclusion: Pregnancy	O12.11	Gestational proteinuria, first trimester
Exclusion: Pregnancy	O12.13	Gestational proteinuria, third trimester
Exclusion: Pregnancy	O12.21	Gestational edema with proteinuria, first trimester
Exclusion: Pregnancy	O12.23	Gestational edema with proteinuria, third trimester
Exclusion: Pregnancy	O13.2	Gestational [pregnancy
Exclusion: Pregnancy	O13.3	Gestational [pregnancy
Exclusion: Pregnancy	O13.4	Gestational [pregnancy
Exclusion: Pregnancy	O14	Pre
Exclusion: Pregnancy	O14.0	Mild to moderate pre
Exclusion: Pregnancy	O14.00	Mild to moderate pre
Exclusion: Pregnancy	O14.03	Mild to moderate pre
Exclusion: Pregnancy	O14.04	Mild to moderate pre
Exclusion: Pregnancy	O14.05	Mild to moderate pre
Exclusion: Pregnancy	O14.1	Severe pre
Exclusion: Pregnancy	O14.13	Severe pre
Exclusion: Pregnancy	O14.14	Severe pre
Exclusion: Pregnancy	O14.20	HELLP syndrome (HELLP), unspecified trimester
Exclusion: Pregnancy	O14.22	HELLP syndrome (HELLP), second trimester
Exclusion: Pregnancy	O14.23	HELLP syndrome (HELLP), third trimester
Exclusion: Pregnancy	O14.24	HELLP syndrome, complicating childbirth
Exclusion: Pregnancy	O14.92	Unspecified pre
Exclusion: Pregnancy	O14.94	Unspecified pre
Exclusion: Pregnancy	O14.95	Unspecified pre
Exclusion: Pregnancy	O15	Eclampsia
Exclusion: Pregnancy	O15.0	Eclampsia complicating pregnancy
Exclusion: Pregnancy	O15.00	Eclampsia complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	O15.02	Eclampsia complicating pregnancy, second trimester
Exclusion: Pregnancy	O15.1	Eclampsia complicating labor
Exclusion: Pregnancy	O15.2	Eclampsia complicating the puerperium
Exclusion: Pregnancy	O16	Unspecified maternal hypertension
Exclusion: Pregnancy	O16.2	Unspecified maternal hypertension, second trimester
Exclusion: Pregnancy	O16.4	Unspecified maternal hypertension, complicating childbirth
Exclusion: Pregnancy	O16.5	Unspecified maternal hypertension, complicating the puerperium
Exclusion: Pregnancy	O16.9	Unspecified maternal hypertension, unspecified trimester
Exclusion: Pregnancy	O20	Hemorrhage in early pregnancy
Exclusion: Pregnancy	O20.9	Hemorrhage in early pregnancy, unspecified
Exclusion: Pregnancy	O21.0	Mild hyperemesis gravidarum
Exclusion: Pregnancy	O21.1	Hyperemesis gravidarum with metabolic disturbance
Exclusion: Pregnancy	O21.8	Other vomiting complicating pregnancy
Exclusion: Pregnancy	O22	Venous complications and hemorrhoids in pregnancy
Exclusion: Pregnancy	O22.02	Varicose veins of lower extremity in pregnancy, second trimester
Exclusion: Pregnancy	O22.03	Varicose veins of lower extremity in pregnancy, third trimester
Exclusion: Pregnancy	O22.2	Superficial thrombophlebitis in pregnancy
Exclusion: Pregnancy	O22.20	Superficial thrombophlebitis in pregnancy, unspecified trimester
Exclusion: Pregnancy	O22.22	Superficial thrombophlebitis in pregnancy, second trimester
Exclusion: Pregnancy	O22.23	Superficial thrombophlebitis in pregnancy, third trimester
Exclusion: Pregnancy	O22.3	Deep phlebotrombosis in pregnancy
Exclusion: Pregnancy	O22.33	Deep phlebotrombosis in pregnancy, third trimester
Exclusion: Pregnancy	O22.4	Hemorrhoids in pregnancy
Exclusion: Pregnancy	O22.40	Hemorrhoids in pregnancy, unspecified trimester
Exclusion: Pregnancy	O22.41	Hemorrhoids in pregnancy, first trimester
Exclusion: Pregnancy	O22.42	Hemorrhoids in pregnancy, second trimester
Exclusion: Pregnancy	O22.43	Hemorrhoids in pregnancy, third trimester
Exclusion: Pregnancy	O22.52	Cerebral venous thrombosis in pregnancy, second trimester
Exclusion: Pregnancy	O22.53	Cerebral venous thrombosis in pregnancy, third trimester
Exclusion: Pregnancy	O22.8	Other venous complications in pregnancy
Exclusion: Pregnancy	O22.8X3	Other venous complications in pregnancy, third trimester
Exclusion: Pregnancy	O22.91	Venous complication in pregnancy, unspecified, first trimester
Exclusion: Pregnancy	O22.93	Venous complication in pregnancy, unspecified, third trimester
Exclusion: Pregnancy	O23	Infections of genitourinary tract in pregnancy
Exclusion: Pregnancy	O23.0	Infections of kidney in pregnancy
Exclusion: Pregnancy	O23.00	Infections of kidney in pregnancy, unspecified trimester
Exclusion: Pregnancy	O23.01	Infections of kidney in pregnancy, first trimester
Exclusion: Pregnancy	O23.02	Infections of kidney in pregnancy, second trimester
Exclusion: Pregnancy	O23.03	Infections of kidney in pregnancy, third trimester
Exclusion: Pregnancy	O23.1	Infections of bladder in pregnancy
Exclusion: Pregnancy	O23.13	Infections of bladder in pregnancy, third trimester
Exclusion: Pregnancy	O23.20	Infections of urethra in pregnancy, unspecified trimester
Exclusion: Pregnancy	O23.21	Infections of urethra in pregnancy, first trimester
Exclusion: Pregnancy	O23.22	Infections of urethra in pregnancy, second trimester
Exclusion: Pregnancy	O23.23	Infections of urethra in pregnancy, third trimester
Exclusion: Pregnancy	O23.3	Infections of other parts of urinary tract in pregnancy
Exclusion: Pregnancy	O23.32	Infections of other parts of urinary tract in pregnancy, second trimester
Exclusion: Pregnancy	O23.33	Infections of other parts of urinary tract in pregnancy, third trimester
Exclusion: Pregnancy	O23.42	Unspecified infection of urinary tract in pregnancy, second trimester
Exclusion: Pregnancy	O23.5	Infections of the genital tract in pregnancy
Exclusion: Pregnancy	O23.52	Salpingo
Exclusion: Pregnancy	O23.529	Salpingo
Exclusion: Pregnancy	O23.59	Infection of other part of genital tract in pregnancy
Exclusion: Pregnancy	O23.591	Infection of other part of genital tract in pregnancy, first trimester
Exclusion: Pregnancy	O23.593	Infection of other part of genital tract in pregnancy, third trimester
Exclusion: Pregnancy	O23.599	Infection of other part of genital tract in pregnancy, unspecified trimester
Exclusion: Pregnancy	O23.9	Unspecified genitourinary tract infection in pregnancy
Exclusion: Pregnancy	O23.90	Unspecified genitourinary tract infection in pregnancy, unspecified trimester
Exclusion: Pregnancy	O23.93	Unspecified genitourinary tract infection in pregnancy, third trimester
Exclusion: Pregnancy	O24.01	Pre
Exclusion: Pregnancy	O24.012	Pre
Exclusion: Pregnancy	O24.013	Pre
Exclusion: Pregnancy	O24.019	Pre
Exclusion: Pregnancy	O24.02	Pre
Exclusion: Pregnancy	O24.11	Pre
Exclusion: Pregnancy	O24.111	Pre
Exclusion: Pregnancy	O24.112	Pre
Exclusion: Pregnancy	O24.113	Pre
Exclusion: Pregnancy	O24.119	Pre
Exclusion: Pregnancy	O24.31	Unspecified pre
Exclusion: Pregnancy	O24.312	Unspecified pre
Exclusion: Pregnancy	O24.313	Unspecified pre
Exclusion: Pregnancy	O24.319	Unspecified pre
Exclusion: Pregnancy	O24.33	Unspecified pre
Exclusion: Pregnancy	O24.4	Gestational diabetes mellitus
Exclusion: Pregnancy	O24.41	Gestational diabetes mellitus in pregnancy
Exclusion: Pregnancy	O24.410	Gestational diabetes mellitus in pregnancy, diet controlled
Exclusion: Pregnancy	O24.415	Gestational diabetes mellitus in pregnancy, controlled by oral hypoglycemic drugs
Exclusion: Pregnancy	O24.419	Gestational diabetes mellitus in pregnancy, unspecified control
Exclusion: Pregnancy	O24.424	Gestational diabetes mellitus in childbirth, insulin controlled
Exclusion: Pregnancy	O24.425	Gestational diabetes mellitus in childbirth, controlled by oral hypoglycemic drugs

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Exclusion: Pregnancy	024.81	Other pre
Exclusion: Pregnancy	024.812	Other pre
Exclusion: Pregnancy	024.819	Other pre
Exclusion: Pregnancy	024.82	Other pre
Exclusion: Pregnancy	024.911	Unspecified diabetes mellitus in pregnancy, first trimester
Exclusion: Pregnancy	024.913	Unspecified diabetes mellitus in pregnancy, third trimester
Exclusion: Pregnancy	024.919	Unspecified diabetes mellitus in pregnancy, unspecified trimester
Exclusion: Pregnancy	024.92	Unspecified diabetes mellitus in childbirth
Exclusion: Pregnancy	024.93	Unspecified diabetes mellitus in the puerperium
Exclusion: Pregnancy	025.1	Malnutrition in pregnancy
Exclusion: Pregnancy	025.10	Malnutrition in pregnancy, unspecified trimester
Exclusion: Pregnancy	025.12	Malnutrition in pregnancy, second trimester
Exclusion: Pregnancy	025.13	Malnutrition in pregnancy, third trimester
Exclusion: Pregnancy	025.2	Malnutrition in childbirth
Exclusion: Pregnancy	026.0	Excessive weight gain in pregnancy
Exclusion: Pregnancy	026.00	Excessive weight gain in pregnancy, unspecified trimester
Exclusion: Pregnancy	026.01	Excessive weight gain in pregnancy, first trimester
Exclusion: Pregnancy	026.20	Pregnancy care for patient with recurrent pregnancy loss, unspecified trimester
Exclusion: Pregnancy	026.30	Retained intrauterine contraceptive device in pregnancy, unspecified trimester
Exclusion: Pregnancy	026.32	Retained intrauterine contraceptive device in pregnancy, second trimester
Exclusion: Pregnancy	026.4	Herpes gestationis
Exclusion: Pregnancy	026.40	Herpes gestationis, unspecified trimester
Exclusion: Pregnancy	026.41	Herpes gestationis, first trimester
Exclusion: Pregnancy	026.5	Maternal hypotension syndrome
Exclusion: Pregnancy	026.50	Maternal hypotension syndrome, unspecified trimester
Exclusion: Pregnancy	026.52	Maternal hypotension syndrome, second trimester
Exclusion: Pregnancy	026.61	Liver and biliary tract disorders in pregnancy
Exclusion: Pregnancy	026.611	Liver and biliary tract disorders in pregnancy, first trimester
Exclusion: Pregnancy	026.619	Liver and biliary tract disorders in pregnancy, unspecified trimester
Exclusion: Pregnancy	026.62	Liver and biliary tract disorders in childbirth
Exclusion: Pregnancy	026.63	Liver and biliary tract disorders in the puerperium
Exclusion: Pregnancy	026.7	Subluxation of symphysis (pubis) in pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	026.711	Subluxation of symphysis (pubis) in pregnancy, first trimester
Exclusion: Pregnancy	026.713	Subluxation of symphysis (pubis) in pregnancy, third trimester
Exclusion: Pregnancy	026.719	Subluxation of symphysis (pubis) in pregnancy, unspecified trimester
Exclusion: Pregnancy	026.72	Subluxation of symphysis (pubis) in childbirth
Exclusion: Pregnancy	026.8	Other specified pregnancy related conditions
Exclusion: Pregnancy	026.81	Pregnancy related exhaustion and fatigue
Exclusion: Pregnancy	026.813	Pregnancy related exhaustion and fatigue, third trimester
Exclusion: Pregnancy	026.819	Pregnancy related exhaustion and fatigue, unspecified trimester
Exclusion: Pregnancy	026.822	Pregnancy related peripheral neuritis, second trimester
Exclusion: Pregnancy	026.829	Pregnancy related peripheral neuritis, unspecified trimester
Exclusion: Pregnancy	026.83	Pregnancy related renal disease
Exclusion: Pregnancy	026.832	Pregnancy related renal disease, second trimester
Exclusion: Pregnancy	026.833	Pregnancy related renal disease, third trimester
Exclusion: Pregnancy	026.841	Uterine size
Exclusion: Pregnancy	026.843	Uterine size
Exclusion: Pregnancy	026.849	Uterine size
Exclusion: Pregnancy	026.85	Spotting complicating pregnancy
Exclusion: Pregnancy	026.852	Spotting complicating pregnancy, second trimester
Exclusion: Pregnancy	026.872	Cervical shortening, second trimester
Exclusion: Pregnancy	026.879	Cervical shortening, unspecified trimester
Exclusion: Pregnancy	026.89	Other specified pregnancy related conditions
Exclusion: Pregnancy	026.891	Other specified pregnancy related conditions, first trimester
Exclusion: Pregnancy	026.892	Other specified pregnancy related conditions, second trimester
Exclusion: Pregnancy	026.9	Pregnancy related conditions, unspecified
Exclusion: Pregnancy	026.91	Pregnancy related conditions, unspecified, first trimester
Exclusion: Pregnancy	026.92	Pregnancy related conditions, unspecified, second trimester
Exclusion: Pregnancy	026.93	Pregnancy related conditions, unspecified, third trimester
Exclusion: Pregnancy	028.1	Abnormal biochemical finding on antenatal screening of mother
Exclusion: Pregnancy	028.2	Abnormal cytological finding on antenatal screening of mother
Exclusion: Pregnancy	028.4	Abnormal radiological finding on antenatal screening of mother
Exclusion: Pregnancy	028.8	Other abnormal findings on antenatal screening of mother
Exclusion: Pregnancy	028.9	Unspecified abnormal findings on antenatal screening of mother
Exclusion: Pregnancy	029	Complications of anesthesia during pregnancy
Exclusion: Pregnancy	029.011	Aspiration pneumonitis due to anesthesia during pregnancy, first trimester
Exclusion: Pregnancy	029.019	Aspiration pneumonitis due to anesthesia during pregnancy, unspecified trimester
Exclusion: Pregnancy	029.023	Pressure collapse of lung due to anesthesia during pregnancy, third trimester
Exclusion: Pregnancy	029.029	Pressure collapse of lung due to anesthesia during pregnancy, unspecified trimester
Exclusion: Pregnancy	029.09	Other pulmonary complications of anesthesia during pregnancy
Exclusion: Pregnancy	029.091	Other pulmonary complications of anesthesia during pregnancy, first trimester
Exclusion: Pregnancy	029.099	Other pulmonary complications of anesthesia during pregnancy, unspecified trimester
Exclusion: Pregnancy	029.113	Cardiac arrest due to anesthesia during pregnancy, third trimester
Exclusion: Pregnancy	029.122	Cardiac failure due to anesthesia during pregnancy, second trimester
Exclusion: Pregnancy	029.129	Cardiac failure due to anesthesia during pregnancy, unspecified trimester
Exclusion: Pregnancy	029.19	Other cardiac complications of anesthesia during pregnancy
Exclusion: Pregnancy	029.191	Other cardiac complications of anesthesia during pregnancy, first trimester
Exclusion: Pregnancy	029.192	Other cardiac complications of anesthesia during pregnancy, second trimester
Exclusion: Pregnancy	029.21	Cerebral anoxia due to anesthesia during pregnancy
Exclusion: Pregnancy	029.212	Cerebral anoxia due to anesthesia during pregnancy, second trimester
Exclusion: Pregnancy	029.213	Cerebral anoxia due to anesthesia during pregnancy, third trimester
Exclusion: Pregnancy	029.219	Cerebral anoxia due to anesthesia during pregnancy, unspecified trimester
Exclusion: Pregnancy	029.29	Other central nervous system complications of anesthesia during pregnancy
Exclusion: Pregnancy	029.291	Other central nervous system complications of anesthesia during pregnancy, first trimester
Exclusion: Pregnancy	029.299	Other central nervous system complications of anesthesia during pregnancy, unspecified trimester
Exclusion: Pregnancy	029.3	Toxic reaction to local anesthesia during pregnancy
Exclusion: Pregnancy	029.3X2	Toxic reaction to local anesthesia during pregnancy, second trimester
Exclusion: Pregnancy	029.40	Spinal and epidural anesthesia induced headache during pregnancy, unspecified trimester
Exclusion: Pregnancy	029.43	Spinal and epidural anesthesia induced headache during pregnancy, third trimester
Exclusion: Pregnancy	029.5	Other complications of spinal and epidural anesthesia during pregnancy
Exclusion: Pregnancy	029.5X	Other complications of spinal and epidural anesthesia during pregnancy
Exclusion: Pregnancy	029.5X9	Other complications of spinal and epidural anesthesia during pregnancy, unspecified trimester
Exclusion: Pregnancy	029.62	Failed or difficult intubation for anesthesia during pregnancy, second trimester
Exclusion: Pregnancy	029.8	Other complications of anesthesia during pregnancy
Exclusion: Pregnancy	029.8X1	Other complications of anesthesia during pregnancy, first trimester
Exclusion: Pregnancy	029.8X2	Other complications of anesthesia during pregnancy, second trimester
Exclusion: Pregnancy	029.8X9	Other complications of anesthesia during pregnancy, unspecified trimester
Exclusion: Pregnancy	029.9	Unspecified complication of anesthesia during pregnancy
Exclusion: Pregnancy	029.90	Unspecified complication of anesthesia during pregnancy, unspecified trimester
Exclusion: Pregnancy	029.92	Unspecified complication of anesthesia during pregnancy, second trimester
Exclusion: Pregnancy	030	Multiple gestation
Exclusion: Pregnancy	030.00	Twin pregnancy, unspecified number of placenta and unspecified number of amniotic sacs
Exclusion: Pregnancy	030.003	Twin pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, third trimester
Exclusion: Pregnancy	030.013	Twin pregnancy, monochorionic/monoamniotic, third trimester
Exclusion: Pregnancy	030.02	Conjoined twin pregnancy
Exclusion: Pregnancy	030.022	Conjoined twin pregnancy, second trimester
Exclusion: Pregnancy	030.029	Conjoined twin pregnancy, unspecified trimester
Exclusion: Pregnancy	030.03	Twin pregnancy, monochorionic/diamniotic

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Exclusion: Pregnancy	030.039	Twin pregnancy, monochorionic/diamniotic, unspecified trimester
Exclusion: Pregnancy	030.04	Twin pregnancy, dichorionic/diamniotic
Exclusion: Pregnancy	030.09	Twin pregnancy, unable to determine number of placenta and number of amniotic sacs
Exclusion: Pregnancy	030.093	Twin pregnancy, unable to determine number of placenta and number of amniotic sacs, third trimester
Exclusion: Pregnancy	030.099	Twin pregnancy, unable to determine number of placenta and number of amniotic sacs, unspecified trimester
Exclusion: Pregnancy	030.1	Triplet pregnancy
Exclusion: Pregnancy	030.10	Triplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs
Exclusion: Pregnancy	030.101	Triplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, first trimester
Exclusion: Pregnancy	030.11	Triplet pregnancy with two or more monochorionic fetuses
Exclusion: Pregnancy	030.112	Triplet pregnancy with two or more monochorionic fetuses, second trimester
Exclusion: Pregnancy	030.119	Triplet pregnancy with two or more monochorionic fetuses, unspecified trimester
Exclusion: Pregnancy	030.122	Triplet pregnancy with two or more monoamniotic fetuses, second trimester
Exclusion: Pregnancy	030.123	Triplet pregnancy with two or more monoamniotic fetuses, third trimester
Exclusion: Pregnancy	030.13	Triplet pregnancy, trichorionic/triamniotic
Exclusion: Pregnancy	030.133	Triplet pregnancy, trichorionic/triamniotic, third trimester
Exclusion: Pregnancy	030.139	Triplet pregnancy, trichorionic/triamniotic, unspecified trimester
Exclusion: Pregnancy	030.19	Triplet pregnancy, unable to determine number of placenta and number of amniotic sacs
Exclusion: Pregnancy	030.192	Triplet pregnancy, unable to determine number of placenta and number of amniotic sacs, second trimester
Exclusion: Pregnancy	030.193	Triplet pregnancy, unable to determine number of placenta and number of amniotic sacs, third trimester
Exclusion: Pregnancy	030.199	Triplet pregnancy, unable to determine number of placenta and number of amniotic sacs, unspecified trimester
Exclusion: Pregnancy	030.20	Quadruplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs
Exclusion: Pregnancy	030.201	Quadruplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, first trimester
Exclusion: Pregnancy	030.202	Quadruplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, second trimester
Exclusion: Pregnancy	030.203	Quadruplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, third trimester
Exclusion: Pregnancy	030.209	Quadruplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, unspecified trimester
Exclusion: Pregnancy	030.21	Quadruplet pregnancy with two or more monochorionic fetuses
Exclusion: Pregnancy	030.212	Quadruplet pregnancy with two or more monochorionic fetuses, second trimester
Exclusion: Pregnancy	030.213	Quadruplet pregnancy with two or more monochorionic fetuses, third trimester
Exclusion: Pregnancy	030.221	Quadruplet pregnancy with two or more monoamniotic fetuses, first trimester
Exclusion: Pregnancy	030.229	Quadruplet pregnancy with two or more monoamniotic fetuses, unspecified trimester
Exclusion: Pregnancy	030.232	Quadruplet pregnancy, quadrachorionic/quadra
Exclusion: Pregnancy	030.233	Quadruplet pregnancy, quadrachorionic/quadra
Exclusion: Pregnancy	030.29	Quadruplet pregnancy, unable to determine number of placenta and number of amniotic sacs
Exclusion: Pregnancy	030.291	Quadruplet pregnancy, unable to determine number of placenta and number of amniotic sacs, first trimester
Exclusion: Pregnancy	030.299	Quadruplet pregnancy, unable to determine number of placenta and number of amniotic sacs, unspecified trimester
Exclusion: Pregnancy	030.80	Other specified multiple gestation, unspecified number of placenta and unspecified number of amniotic sacs
Exclusion: Pregnancy	030.802	Other specified multiple gestation, unspecified number of placenta and unspecified number of amniotic sacs, second trimester
Exclusion: Pregnancy	030.803	Other specified multiple gestation, unspecified number of placenta and unspecified number of amniotic sacs, third trimester
Exclusion: Pregnancy	030.82	Other specified multiple gestation with two or more monoamniotic fetuses
Exclusion: Pregnancy	030.821	Other specified multiple gestation with two or more monoamniotic fetuses, first trimester
Exclusion: Pregnancy	030.829	Other specified multiple gestation with two or more monoamniotic fetuses, unspecified trimester
Exclusion: Pregnancy	030.833	Other specified multiple gestation, number of chorions and amnions are both equal to the number of fetuses, third trimester
Exclusion: Pregnancy	030.899	Other specified multiple gestation, unable to determine number of placenta and number of amniotic sacs, unspecified trimester
Exclusion: Pregnancy	030.90	Multiple gestation, unspecified, unspecified trimester
Exclusion: Pregnancy	030.93	Multiple gestation, unspecified, third trimester
Exclusion: Pregnancy	031.0	Papryaceous fetus
Exclusion: Pregnancy	031.00	Papryaceous fetus, unspecified trimester
Exclusion: Pregnancy	031.00X0	Papryaceous fetus, unspecified trimester, not applicable or unspecified
Exclusion: Pregnancy	031.00X2	Papryaceous fetus, unspecified trimester, fetus 2
Exclusion: Pregnancy	031.00X3	Papryaceous fetus, unspecified trimester, fetus 3
Exclusion: Pregnancy	031.01	Papryaceous fetus, first trimester
Exclusion: Pregnancy	031.01X3	Papryaceous fetus, first trimester, fetus 3
Exclusion: Pregnancy	031.01X4	Papryaceous fetus, first trimester, fetus 4
Exclusion: Pregnancy	031.02X1	Papryaceous fetus, second trimester, fetus 1
Exclusion: Pregnancy	031.02X2	Papryaceous fetus, second trimester, fetus 2
Exclusion: Pregnancy	031.02X4	Papryaceous fetus, second trimester, fetus 4
Exclusion: Pregnancy	031.02X5	Papryaceous fetus, second trimester, fetus 5
Exclusion: Pregnancy	031.1	Continuing pregnancy after spontaneous abortion of one fetus or more
Exclusion: Pregnancy	031.13X0	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, not applicable or unspecified
Exclusion: Pregnancy	031.13X2	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 2
Exclusion: Pregnancy	031.20	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester
Exclusion: Pregnancy	031.20X0	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester, not applicable or unspecified
Exclusion: Pregnancy	031.20X1	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester, fetus 1
Exclusion: Pregnancy	031.20X3	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester, fetus 3
Exclusion: Pregnancy	031.20X9	Continuing pregnancy after intrauterine death of one fetus or more, unspecified trimester, other fetus
Exclusion: Pregnancy	031.22X4	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 4
Exclusion: Pregnancy	031.22X9	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, other fetus
Exclusion: Pregnancy	031.30	Continuing pregnancy after elective fetal reduction of one fetus or more, unspecified trimester
Exclusion: Pregnancy	031.8	Other complications specific to multiple gestation
Exclusion: Pregnancy	031.8X	Other complications specific to multiple gestation
Exclusion: Pregnancy	031.8X1	Other complications specific to multiple gestation, first trimester
Exclusion: Pregnancy	031.8X12	Other complications specific to multiple gestation, first trimester, fetus 2
Exclusion: Pregnancy	031.8X13	Other complications specific to multiple gestation, first trimester, fetus 3
Exclusion: Pregnancy	031.8X19	Other complications specific to multiple gestation, first trimester, other fetus
Exclusion: Pregnancy	031.8X2	Other complications specific to multiple gestation, second trimester
Exclusion: Pregnancy	031.8X21	Other complications specific to multiple gestation, second trimester, fetus 1
Exclusion: Pregnancy	031.8X22	Other complications specific to multiple gestation, second trimester, fetus 2
Exclusion: Pregnancy	031.8X23	Other complications specific to multiple gestation, second trimester, fetus 3
Exclusion: Pregnancy	031.8X25	Other complications specific to multiple gestation, second trimester, fetus 5
Exclusion: Pregnancy	031.8X30	Other complications specific to multiple gestation, third trimester, not applicable or unspecified
Exclusion: Pregnancy	031.8X31	Other complications specific to multiple gestation, third trimester, fetus 1
Exclusion: Pregnancy	031.8X32	Other complications specific to multiple gestation, third trimester, fetus 2
Exclusion: Pregnancy	031.8X33	Other complications specific to multiple gestation, third trimester, fetus 3
Exclusion: Pregnancy	031.8X34	Other complications specific to multiple gestation, third trimester, fetus 4
Exclusion: Pregnancy	031.8X9	Other complications specific to multiple gestation, unspecified trimester
Exclusion: Pregnancy	031.8X93	Other complications specific to multiple gestation, unspecified trimester, fetus 3
Exclusion: Pregnancy	031.8X95	Other complications specific to multiple gestation, unspecified trimester, fetus 5
Exclusion: Pregnancy	031.8X99	Other complications specific to multiple gestation, unspecified trimester, other fetus
Exclusion: Pregnancy	033.0	Maternal care for disproportion due to deformity of maternal pelvic bones
Exclusion: Pregnancy	034	Maternal care for abnormality of pelvic organs
Exclusion: Pregnancy	034.02	Maternal care for unspecified congenital malformation of uterus, second trimester
Exclusion: Pregnancy	034.1	Maternal care for benign tumor of corpus uteri
Exclusion: Pregnancy	034.10	Maternal care for benign tumor of corpus uteri, unspecified trimester
Exclusion: Pregnancy	034.11	Maternal care for benign tumor of corpus uteri, first trimester
Exclusion: Pregnancy	034.13	Maternal care for benign tumor of corpus uteri, third trimester
Exclusion: Pregnancy	034.2	Maternal care due to uterine scar from previous surgery
Exclusion: Pregnancy	034.212	Maternal care for vertical scar from previous cesarean delivery
Exclusion: Pregnancy	034.29	Maternal care due to uterine scar from other previous surgery
Exclusion: Pregnancy	034.31	Maternal care for cervical incompetence, first trimester
Exclusion: Pregnancy	034.32	Maternal care for cervical incompetence, second trimester
Exclusion: Pregnancy	034.4	Maternal care for other abnormalities of cervix
Exclusion: Pregnancy	034.41	Maternal care for other abnormalities of cervix, first trimester
Exclusion: Pregnancy	034.51	Maternal care for incarceration of gravid uterus
Exclusion: Pregnancy	034.521	Maternal care for prolapse of gravid uterus, first trimester
Exclusion: Pregnancy	034.53	Maternal care for retroversion of gravid uterus
Exclusion: Pregnancy	034.533	Maternal care for retroversion of gravid uterus, third trimester
Exclusion: Pregnancy	034.591	Maternal care for other abnormalities of gravid uterus, first trimester
Exclusion: Pregnancy	034.593	Maternal care for other abnormalities of gravid uterus, third trimester

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Exclusion: Pregnancy	O41.90X1	Disorder of amniotic fluid and membranes, unspecified, unspecified trimester, fetus 1
Exclusion: Pregnancy	O41.90X3	Disorder of amniotic fluid and membranes, unspecified, unspecified trimester, fetus 3
Exclusion: Pregnancy	O41.91X9	Disorder of amniotic fluid and membranes, unspecified, first trimester, other fetus
Exclusion: Pregnancy	O41.92	Disorder of amniotic fluid and membranes, unspecified, second trimester
Exclusion: Pregnancy	O41.92X0	Disorder of amniotic fluid and membranes, unspecified, second trimester, not applicable or unspecified
Exclusion: Pregnancy	O41.92X3	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 3
Exclusion: Pregnancy	O41.92X5	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 5
Exclusion: Pregnancy	O41.92X9	Disorder of amniotic fluid and membranes, unspecified, second trimester, other fetus
Exclusion: Pregnancy	O42.01	Preterm premature rupture of membranes, onset of labor within 24 hours of rupture
Exclusion: Pregnancy	O42.012	Preterm premature rupture of membranes, onset of labor within 24 hours of rupture, second trimester
Exclusion: Pregnancy	O42.1	Premature rupture of membranes, onset of labor more than 24 hours following rupture
Exclusion: Pregnancy	O42.10	Premature rupture of membranes, onset of labor more than 24 hours following rupture, unspecified weeks of gestation
Exclusion: Pregnancy	O42.111	Preterm premature rupture of membranes, onset of labor more than 24 hours following rupture, first trimester
Exclusion: Pregnancy	O42.113	Preterm premature rupture of membranes, onset of labor more than 24 hours following rupture, third trimester
Exclusion: Pregnancy	O42.119	Preterm premature rupture of membranes, onset of labor more than 24 hours following rupture, unspecified trimester
Exclusion: Pregnancy	O42.9	Premature rupture of membranes, unspecified as to length of time between rupture and onset of labor
Exclusion: Pregnancy	O42.91	Preterm premature rupture of membranes, unspecified as to length of time between rupture and onset of labor
Exclusion: Pregnancy	O42.911	Preterm premature rupture of membranes, unspecified as to length of time between rupture and onset of labor, first trimester
Exclusion: Pregnancy	O42.919	Preterm premature rupture of membranes, unspecified as to length of time between rupture and onset of labor, unspecified trimester
Exclusion: Pregnancy	O43	Placental disorders
Exclusion: Pregnancy	O43.013	Fetomaternal placental transfusion syndrome, third trimester
Exclusion: Pregnancy	O43.02	Fetus
Exclusion: Pregnancy	O43.023	Fetus
Exclusion: Pregnancy	O43.029	Fetus
Exclusion: Pregnancy	O43.101	Malformation of placenta, unspecified, first trimester
Exclusion: Pregnancy	O43.102	Malformation of placenta, unspecified, second trimester
Exclusion: Pregnancy	O43.111	Circumvallate placenta, first trimester
Exclusion: Pregnancy	O43.122	Velamentous insertion of umbilical cord, second trimester
Exclusion: Pregnancy	O43.19	Other malformation of placenta
Exclusion: Pregnancy	O43.192	Other malformation of placenta, second trimester
Exclusion: Pregnancy	O43.211	Placenta accreta, first trimester
Exclusion: Pregnancy	O43.219	Placenta accreta, unspecified trimester
Exclusion: Pregnancy	O43.221	Placenta increta, first trimester
Exclusion: Pregnancy	O43.229	Placenta increta, unspecified trimester
Exclusion: Pregnancy	O43.231	Placenta percreta, first trimester
Exclusion: Pregnancy	O43.81	Placental infarction
Exclusion: Pregnancy	O43.812	Placental infarction, second trimester
Exclusion: Pregnancy	O43.813	Placental infarction, third trimester
Exclusion: Pregnancy	O43.892	Other placental disorders, second trimester
Exclusion: Pregnancy	O43.92	Unspecified placental disorder, second trimester
Exclusion: Pregnancy	O44	Placenta previa
Exclusion: Pregnancy	O44.00	Complete placenta previa NOS or without hemorrhage, unspecified trimester
Exclusion: Pregnancy	O44.02	Complete placenta previa NOS or without hemorrhage, second trimester
Exclusion: Pregnancy	O44.03	Complete placenta previa NOS or without hemorrhage, third trimester
Exclusion: Pregnancy	O44.10	Complete placenta previa with hemorrhage, unspecified trimester
Exclusion: Pregnancy	O44.11	Complete placenta previa with hemorrhage, first trimester
Exclusion: Pregnancy	O44.13	Complete placenta previa with hemorrhage, third trimester
Exclusion: Pregnancy	O44.21	Partial placenta previa NOS or without hemorrhage, first trimester
Exclusion: Pregnancy	O44.3	Partial placenta previa with hemorrhage
Exclusion: Pregnancy	O44.31	Partial placenta previa with hemorrhage, first trimester
Exclusion: Pregnancy	O44.4	Low lying placenta NOS or without hemorrhage
Exclusion: Pregnancy	O44.40	Low lying placenta NOS or without hemorrhage, unspecified trimester
Exclusion: Pregnancy	O44.41	Low lying placenta NOS or without hemorrhage, first trimester
Exclusion: Pregnancy	O44.42	Low lying placenta NOS or without hemorrhage, second trimester
Exclusion: Pregnancy	O44.43	Low lying placenta NOS or without hemorrhage, third trimester
Exclusion: Pregnancy	O44.5	Low lying placenta with hemorrhage
Exclusion: Pregnancy	O44.53	Low lying placenta with hemorrhage, third trimester
Exclusion: Pregnancy	O45.0	Premature separation of placenta with coagulation defect
Exclusion: Pregnancy	O45.00	Premature separation of placenta with coagulation defect, unspecified
Exclusion: Pregnancy	O45.009	Premature separation of placenta with coagulation defect, unspecified, unspecified trimester
Exclusion: Pregnancy	O45.01	Premature separation of placenta with afibrinogenemia
Exclusion: Pregnancy	O45.013	Premature separation of placenta with afibrinogenemia, third trimester
Exclusion: Pregnancy	O45.021	Premature separation of placenta with disseminated intravascular coagulation, first trimester
Exclusion: Pregnancy	O45.029	Premature separation of placenta with disseminated intravascular coagulation, unspecified trimester
Exclusion: Pregnancy	O45.092	Premature separation of placenta with other coagulation defect, second trimester
Exclusion: Pregnancy	O45.099	Premature separation of placenta with other coagulation defect, unspecified trimester
Exclusion: Pregnancy	O45.8X	Other premature separation of placenta
Exclusion: Pregnancy	O45.8X9	Other premature separation of placenta, unspecified trimester
Exclusion: Pregnancy	O45.91	Premature separation of placenta, unspecified, first trimester
Exclusion: Pregnancy	O45.92	Premature separation of placenta, unspecified, second trimester
Exclusion: Pregnancy	O45.93	Premature separation of placenta, unspecified, third trimester
Exclusion: Pregnancy	O46	Antepartum hemorrhage, not elsewhere classified
Exclusion: Pregnancy	O46.0	Antepartum hemorrhage with coagulation defect
Exclusion: Pregnancy	O46.00	Antepartum hemorrhage with coagulation defect, unspecified
Exclusion: Pregnancy	O46.001	Antepartum hemorrhage with coagulation defect, unspecified, first trimester
Exclusion: Pregnancy	O46.009	Antepartum hemorrhage with coagulation defect, unspecified, unspecified trimester
Exclusion: Pregnancy	O46.011	Antepartum hemorrhage with afibrinogenemia, first trimester
Exclusion: Pregnancy	O46.013	Antepartum hemorrhage with afibrinogenemia, third trimester
Exclusion: Pregnancy	O46.019	Antepartum hemorrhage with afibrinogenemia, unspecified trimester
Exclusion: Pregnancy	O46.02	Antepartum hemorrhage with disseminated intravascular coagulation
Exclusion: Pregnancy	O46.029	Antepartum hemorrhage with disseminated intravascular coagulation, unspecified trimester
Exclusion: Pregnancy	O46.093	Antepartum hemorrhage with other coagulation defect, third trimester
Exclusion: Pregnancy	O46.8X2	Other antepartum hemorrhage, second trimester
Exclusion: Pregnancy	O46.91	Antepartum hemorrhage, unspecified, first trimester
Exclusion: Pregnancy	O46.92	Antepartum hemorrhage, unspecified, second trimester
Exclusion: Pregnancy	O46.93	Antepartum hemorrhage, unspecified, third trimester
Exclusion: Pregnancy	O47.0	False labor before 37 completed weeks of gestation
Exclusion: Pregnancy	O47.1	False labor at or after 37 completed weeks of gestation
Exclusion: Pregnancy	O47.9	False labor, unspecified
Exclusion: Pregnancy	O48.0	Post
Exclusion: Pregnancy	O48.1	Prolonged pregnancy
Exclusion: Pregnancy	O60.00	Preterm labor without delivery, unspecified trimester
Exclusion: Pregnancy	O60.10	Preterm labor with preterm delivery, unspecified trimester
Exclusion: Pregnancy	O60.10X	
Exclusion: Pregnancy	O60.10X0	Preterm labor with preterm delivery, unspecified trimester, not applicable or unspecified
Exclusion: Pregnancy	O60.10X1	Preterm labor with preterm delivery, unspecified trimester, fetus 1
Exclusion: Pregnancy	O60.10X9	Preterm labor with preterm delivery, unspecified trimester, other fetus
Exclusion: Pregnancy	O60.12	Preterm labor second trimester with preterm delivery second trimester
Exclusion: Pregnancy	O60.12X	
Exclusion: Pregnancy	O60.12X1	Preterm labor second trimester with preterm delivery second trimester, fetus 1
Exclusion: Pregnancy	O60.12X3	Preterm labor second trimester with preterm delivery second trimester, fetus 3
Exclusion: Pregnancy	O60.12X9	Preterm labor second trimester with preterm delivery second trimester, other fetus
Exclusion: Pregnancy	O60.13	Preterm labor second trimester with preterm delivery third trimester
Exclusion: Pregnancy	O60.13X1	Preterm labor second trimester with preterm delivery third trimester, fetus 1
Exclusion: Pregnancy	O60.13X4	Preterm labor second trimester with preterm delivery third trimester, fetus 4
Exclusion: Pregnancy	O60.13X9	Preterm labor second trimester with preterm delivery third trimester, other fetus
Exclusion: Pregnancy	O60.14	Preterm labor third trimester with preterm delivery third trimester
Exclusion: Pregnancy	O60.14X0	Preterm labor third trimester with preterm delivery third trimester, not applicable or unspecified

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Exclusion: Pregnancy	060.14X1	Preterm labor third trimester with preterm delivery third trimester, fetus 1
Exclusion: Pregnancy	060.14X2	Preterm labor third trimester with preterm delivery third trimester, fetus 2
Exclusion: Pregnancy	060.14X4	Preterm labor third trimester with preterm delivery third trimester, fetus 4
Exclusion: Pregnancy	061	Failed induction of labor
Exclusion: Pregnancy	061.0	Failed medical induction of labor
Exclusion: Pregnancy	061.8	Other failed induction of labor
Exclusion: Pregnancy	061.9	Failed induction of labor, unspecified
Exclusion: Pregnancy	063.2	Delayed delivery of second twin, triplet, etc.
Exclusion: Pregnancy	071.02	Rupture of uterus before onset of labor, second trimester
Exclusion: Pregnancy	071.03	Rupture of uterus before onset of labor, third trimester
Exclusion: Pregnancy	072	Postpartum hemorrhage
Exclusion: Pregnancy	072.0	Third
Exclusion: Pregnancy	072.1	Other immediate postpartum hemorrhage
Exclusion: Pregnancy	072.2	Delayed and secondary postpartum hemorrhage
Exclusion: Pregnancy	073	Retained placenta and membranes, without hemorrhage
Exclusion: Pregnancy	073.0	Retained placenta without hemorrhage
Exclusion: Pregnancy	075.1	Shock during or following labor and delivery
Exclusion: Pregnancy	075.3	Other infection during labor
Exclusion: Pregnancy	075.81	Maternal exhaustion complicating labor and delivery
Exclusion: Pregnancy	075.82	Onset (spontaneous) of labor after 37 completed weeks of gestation but before 39 completed weeks gestation, with delivery by (planned) cesarean section
Exclusion: Pregnancy	075.89	Other specified complications of labor and delivery
Exclusion: Pregnancy	075.9	Complication of labor and delivery, unspecified
Exclusion: Pregnancy	094	Sequelae of complication of pregnancy, childbirth, and the puerperium
Exclusion: Pregnancy	098.0	Tuberculosis complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	098.013	Tuberculosis complicating pregnancy, third trimester
Exclusion: Pregnancy	098.019	Tuberculosis complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	098.112	Syphilis complicating pregnancy, second trimester
Exclusion: Pregnancy	098.113	Syphilis complicating pregnancy, third trimester
Exclusion: Pregnancy	098.2	Gonorrhea complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	098.211	Gonorrhea complicating pregnancy, first trimester
Exclusion: Pregnancy	098.212	Gonorrhea complicating pregnancy, second trimester
Exclusion: Pregnancy	098.213	Gonorrhea complicating pregnancy, third trimester
Exclusion: Pregnancy	098.22	Gonorrhea complicating childbirth
Exclusion: Pregnancy	098.3	Other infections with a predominantly sexual mode of transmission complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	098.32	Other infections with a predominantly sexual mode of transmission complicating childbirth
Exclusion: Pregnancy	098.33	Other infections with a predominantly sexual mode of transmission complicating the puerperium
Exclusion: Pregnancy	098.412	Viral hepatitis complicating pregnancy, second trimester
Exclusion: Pregnancy	098.413	Viral hepatitis complicating pregnancy, third trimester
Exclusion: Pregnancy	098.42	Viral hepatitis complicating childbirth
Exclusion: Pregnancy	098.43	Viral hepatitis complicating the puerperium
Exclusion: Pregnancy	098.5	Other viral diseases complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	098.51	Other viral diseases complicating pregnancy
Exclusion: Pregnancy	098.511	Other viral diseases complicating pregnancy, first trimester
Exclusion: Pregnancy	098.513	Other viral diseases complicating pregnancy, third trimester
Exclusion: Pregnancy	098.519	Other viral diseases complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	098.52	Other viral diseases complicating childbirth
Exclusion: Pregnancy	098.53	Other viral diseases complicating the puerperium
Exclusion: Pregnancy	098.619	Protozoal diseases complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	098.8	Other maternal infectious and parasitic diseases complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	098.81	Other maternal infectious and parasitic diseases complicating pregnancy
Exclusion: Pregnancy	098.819	Other maternal infectious and parasitic diseases complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	098.82	Other maternal infectious and parasitic diseases complicating childbirth
Exclusion: Pregnancy	098.83	Other maternal infectious and parasitic diseases complicating the puerperium
Exclusion: Pregnancy	098.9	Unspecified maternal infectious and parasitic disease complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	098.91	Unspecified maternal infectious and parasitic disease complicating pregnancy
Exclusion: Pregnancy	098.92	Unspecified maternal infectious and parasitic disease complicating childbirth
Exclusion: Pregnancy	099	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	099.012	Anemia complicating pregnancy, second trimester
Exclusion: Pregnancy	099.019	Anemia complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	099.1	Other diseases of the blood and blood
Exclusion: Pregnancy	099.112	Other diseases of the blood and blood
Exclusion: Pregnancy	099.113	Other diseases of the blood and blood
Exclusion: Pregnancy	099.119	Other diseases of the blood and blood
Exclusion: Pregnancy	099.2	Endocrine, nutritional and metabolic diseases complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	099.213	Obesity complicating pregnancy, third trimester
Exclusion: Pregnancy	099.215	Obesity complicating the puerperium
Exclusion: Pregnancy	099.28	Other endocrine, nutritional and metabolic diseases complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	099.281	Endocrine, nutritional and metabolic diseases complicating pregnancy, first trimester
Exclusion: Pregnancy	099.282	Endocrine, nutritional and metabolic diseases complicating pregnancy, second trimester
Exclusion: Pregnancy	099.285	Endocrine, nutritional and metabolic diseases complicating the puerperium
Exclusion: Pregnancy	099.3	Mental disorders and diseases of the nervous system complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	099.31	Alcohol use complicating pregnancy, childbirth, and the puerperium
Exclusion: Pregnancy	099.313	Alcohol use complicating pregnancy, third trimester
Exclusion: Pregnancy	099.314	Alcohol use complicating childbirth
Exclusion: Pregnancy	099.315	Alcohol use complicating the puerperium
Exclusion: Pregnancy	099.32	Drug use complicating pregnancy, childbirth, and the puerperium
Exclusion: Pregnancy	099.321	Drug use complicating pregnancy, first trimester
Exclusion: Pregnancy	099.323	Drug use complicating pregnancy, third trimester
Exclusion: Pregnancy	099.33	Tobacco use disorder complicating pregnancy, childbirth, and the puerperium
Exclusion: Pregnancy	099.331	Smoking (tobacco) complicating pregnancy, first trimester
Exclusion: Pregnancy	099.332	Smoking (tobacco) complicating pregnancy, second trimester
Exclusion: Pregnancy	099.333	Smoking (tobacco) complicating pregnancy, third trimester
Exclusion: Pregnancy	099.334	Smoking (tobacco) complicating childbirth
Exclusion: Pregnancy	099.340	Other mental disorders complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	099.341	Other mental disorders complicating pregnancy, first trimester
Exclusion: Pregnancy	099.342	Other mental disorders complicating pregnancy, second trimester
Exclusion: Pregnancy	099.344	Other mental disorders complicating childbirth
Exclusion: Pregnancy	099.35	Diseases of the nervous system complicating pregnancy, childbirth, and the puerperium
Exclusion: Pregnancy	099.350	Diseases of the nervous system complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	099.351	Diseases of the nervous system complicating pregnancy, first trimester
Exclusion: Pregnancy	099.352	Diseases of the nervous system complicating pregnancy, second trimester
Exclusion: Pregnancy	099.354	Diseases of the nervous system complicating childbirth
Exclusion: Pregnancy	099.355	Diseases of the nervous system complicating the puerperium
Exclusion: Pregnancy	099.412	Diseases of the circulatory system complicating pregnancy, second trimester
Exclusion: Pregnancy	099.419	Diseases of the circulatory system complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	099.42	Diseases of the circulatory system complicating childbirth
Exclusion: Pregnancy	099.43	Diseases of the circulatory system complicating the puerperium
Exclusion: Pregnancy	099.5	Diseases of the respiratory system complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	099.511	Diseases of the respiratory system complicating pregnancy, first trimester
Exclusion: Pregnancy	099.512	Diseases of the respiratory system complicating pregnancy, second trimester
Exclusion: Pregnancy	099.513	Diseases of the respiratory system complicating pregnancy, third trimester
Exclusion: Pregnancy	099.611	Diseases of the digestive system complicating pregnancy, first trimester
Exclusion: Pregnancy	099.613	Diseases of the digestive system complicating pregnancy, third trimester
Exclusion: Pregnancy	099.619	Diseases of the digestive system complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	099.7	Diseases of the skin and subcutaneous tissue complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	099.711	Diseases of the skin and subcutaneous tissue complicating pregnancy, first trimester
Exclusion: Pregnancy	099.719	Diseases of the skin and subcutaneous tissue complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	099.73	Diseases of the skin and subcutaneous tissue complicating the puerperium

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Exclusion: Pregnancy	O99.8	Other specified diseases and conditions complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	O99.81	Abnormal glucose complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	O99.810	Abnormal glucose complicating pregnancy
Exclusion: Pregnancy	O99.814	Abnormal glucose complicating childbirth
Exclusion: Pregnancy	O99.820	Streptococcus B carrier state complicating pregnancy
Exclusion: Pregnancy	O99.835	Other infection carrier state complicating the puerperium
Exclusion: Pregnancy	O99.840	Bariatric surgery status complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	O99.842	Bariatric surgery status complicating pregnancy, second trimester
Exclusion: Pregnancy	O99.843	Bariatric surgery status complicating pregnancy, third trimester
Exclusion: Pregnancy	O99.89	Other specified diseases and conditions complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	O9A	Maternal malignant neoplasms, traumatic injuries and abuse classifiable elsewhere but complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	O9A.1	Malignant neoplasm complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	O9A.11	Malignant neoplasm complicating pregnancy
Exclusion: Pregnancy	O9A.12	Malignant neoplasm complicating childbirth
Exclusion: Pregnancy	O9A.13	Malignant neoplasm complicating the puerperium
Exclusion: Pregnancy	O9A.2	Injury, poisoning and certain other consequences of external causes complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	O9A.21	Injury, poisoning and certain other consequences of external causes complicating pregnancy
Exclusion: Pregnancy	O9A.211	Injury, poisoning and certain other consequences of external causes complicating pregnancy, first trimester
Exclusion: Pregnancy	O9A.219	Injury, poisoning and certain other consequences of external causes complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	O9A.23	Injury, poisoning and certain other consequences of external causes complicating the puerperium
Exclusion: Pregnancy	O9A.31	Physical abuse complicating pregnancy
Exclusion: Pregnancy	O9A.312	Physical abuse complicating pregnancy, second trimester
Exclusion: Pregnancy	O9A.4	Sexual abuse complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	O9A.413	Sexual abuse complicating pregnancy, third trimester
Exclusion: Pregnancy	O9A.419	Sexual abuse complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	O9A.43	Sexual abuse complicating the puerperium
Exclusion: Pregnancy	O9A.5	Psychological abuse complicating pregnancy, childbirth and the puerperium
Exclusion: Pregnancy	O9A.511	Psychological abuse complicating pregnancy, first trimester
Exclusion: Pregnancy	O9A.512	Psychological abuse complicating pregnancy, second trimester
Exclusion: Pregnancy	O9A.513	Psychological abuse complicating pregnancy, third trimester
Exclusion: Pregnancy	O9A.519	Psychological abuse complicating pregnancy, unspecified trimester
Exclusion: Pregnancy	O9A.53	Psychological abuse complicating the puerperium
Exclusion: Pregnancy	P01.5	Newborn affected by multiple pregnancy
Exclusion: Pregnancy	P05.01	Newborn light for gestational age, less than 500 grams
Exclusion: Pregnancy	P05.03	Newborn light for gestational age, 750
Exclusion: Pregnancy	P05.05	Newborn light for gestational age, 1250
Exclusion: Pregnancy	P05.11	Newborn small for gestational age, less than 500 grams
Exclusion: Pregnancy	P05.13	Newborn small for gestational age, 750
Exclusion: Pregnancy	P05.14	Newborn small for gestational age, 1000
Exclusion: Pregnancy	P07.01	Extremely low birth weight newborn, less than 500 grams
Exclusion: Pregnancy	P07.02	Extremely low birth weight newborn, 500
Exclusion: Pregnancy	P07.03	Extremely low birth weight newborn, 750
Exclusion: Pregnancy	P07.14	Other low birth weight newborn, 1000
Exclusion: Pregnancy	P07.15	Other low birth weight newborn, 1250
Exclusion: Pregnancy	P07.16	Other low birth weight newborn, 1500
Exclusion: Pregnancy	P07.20	Extreme immaturity of newborn, unspecified weeks of gestation
Exclusion: Pregnancy	P07.21	Extreme immaturity of newborn, gestational age less than 23 completed weeks
Exclusion: Pregnancy	P07.23	Extreme immaturity of newborn, gestational age 24 completed weeks
Exclusion: Pregnancy	P07.25	Extreme immaturity of newborn, gestational age 26 completed weeks
Exclusion: Pregnancy	P07.26	Extreme immaturity of newborn, gestational age 27 completed weeks
Exclusion: Pregnancy	P07.30	Preterm newborn, unspecified weeks of gestation
Exclusion: Pregnancy	P07.33	Preterm newborn, gestational age 30 completed weeks
Exclusion: Pregnancy	P07.36	Preterm newborn, gestational age 33 completed weeks
Exclusion: Pregnancy	P07.37	Preterm newborn, gestational age 34 completed weeks
Exclusion: Pregnancy	P07.39	Preterm newborn, gestational age 36 completed weeks
Exclusion: Pregnancy	P08.22	Prolonged gestation of newborn
Exclusion: Pregnancy	P61.2	Anemia of prematurity
Exclusion: Pregnancy	Z33	Pregnant state
Exclusion: Pregnancy	Z33.1	Pregnant state, incidental
Exclusion: Pregnancy	Z34.00	Encounter for supervision of normal first pregnancy, unspecified trimester
Exclusion: Pregnancy	Z34.03	Encounter for supervision of normal first pregnancy, third trimester
Exclusion: Pregnancy	Z34.8	Encounter for supervision of other normal pregnancy
Exclusion: Pregnancy	Z34.81	Encounter for supervision of other normal pregnancy, first trimester
Exclusion: Pregnancy	Z34.82	Encounter for supervision of other normal pregnancy, second trimester
Exclusion: Pregnancy	Z34.90	Encounter for supervision of normal pregnancy, unspecified, unspecified trimester
Exclusion: Pregnancy	Z34.93	Encounter for supervision of normal pregnancy, unspecified, third trimester
Exclusion: Pregnancy	Z36	Encounter for antenatal screening of mother
Exclusion: Pregnancy	Z36.0	Encounter for antenatal screening for chromosomal anomalies
Exclusion: Pregnancy	Z36.1	Encounter for antenatal screening for raised alpha fetoprotein level
Exclusion: Pregnancy	Z36.2	Encounter for other antenatal screening follow
Exclusion: Pregnancy	Z36.3	Encounter for antenatal screening for malformations
Exclusion: Pregnancy	Z36.81	Encounter for antenatal screening for hydrops fetalis
Exclusion: Pregnancy	Z36.86	Encounter for antenatal screening for cervical length
Exclusion: Pregnancy	Z36.87	Encounter for antenatal screening for uncertain dates
Exclusion: Pregnancy	Z36.89	Encounter for other specified antenatal screening
Exclusion: Pregnancy	Z36.8A	Encounter for antenatal screening for other genetic defects
Exclusion: Pregnancy	Z36.9	Encounter for antenatal screening, unspecified
Exclusion: Pregnancy	Z37.2	Twins, both liveborn
Exclusion: Pregnancy	Z37.5	Other multiple births, all liveborn
Exclusion: Pregnancy	Z37.51	Triplets, all liveborn
Exclusion: Pregnancy	Z37.52	Quadruplets, all liveborn
Exclusion: Pregnancy	Z37.53	Quintuplets, all liveborn
Exclusion: Pregnancy	Z37.54	Sextuplets, all liveborn
Exclusion: Pregnancy	Z37.6	Other multiple births, some liveborn
Exclusion: Pregnancy	Z37.60	Multiple births, unspecified, some liveborn
Exclusion: Pregnancy	Z37.61	Triplets, some liveborn
Exclusion: Pregnancy	Z37.69	Other multiple births, some liveborn
Exclusion: Pregnancy	Z38.30	Twin liveborn infant, delivered vaginally
Exclusion: Pregnancy	Z38.5	Twin liveborn infant, unspecified as to place of birth
Exclusion: Pregnancy	Z38.61	Triplet liveborn infant, delivered vaginally
Exclusion: Pregnancy	Z38.63	Quadruplet liveborn infant, delivered vaginally
Exclusion: Pregnancy	Z38.68	Other multiple liveborn infant, delivered vaginally
Exclusion: Pregnancy	Z38.8	Other multiple liveborn infant, unspecified as to place of birth
Exclusion: Pregnancy	Z39	Encounter for maternal postpartum care and examination
Exclusion: Pregnancy	Z39.0	Encounter for care and examination of mother immediately after delivery
Exclusion: Pregnancy	Z39.1	Encounter for care and examination of lactating mother
Exclusion: Pregnancy	Z3A	Weeks of gestation
Exclusion: Pregnancy	Z3A.0	Weeks of gestation of pregnancy, unspecified or less than 10 weeks
Exclusion: Pregnancy	Z3A.01	Less than 8 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.10	10 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.12	12 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.13	13 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.15	15 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.17	17 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.18	18 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.19	19 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.20	20 weeks gestation of pregnancy
Exclusion: Pregnancy	Z3A.23	23 weeks gestation of pregnancy

Appendix A: Codes

Exclusion: Pregnancy	036.90X4	Maternal care for fetal problem, unspecified, unspecified trimester, fetus 4
Exclusion: Pregnancy	036.90X5	Maternal care for fetal problem, unspecified, unspecified trimester, fetus 5
Exclusion: Pregnancy	036.90X9	Maternal care for fetal problem, unspecified, unspecified trimester, other fetus
Exclusion: Pregnancy	036.92	Maternal care for fetal problem, unspecified, second trimester
Exclusion: Pregnancy	036.92X0	Maternal care for fetal problem, unspecified, second trimester, not applicable or unspecified
Exclusion: Pregnancy	036.92X1	Maternal care for fetal problem, unspecified, second trimester, fetus 1
Exclusion: Pregnancy	036.92X2	Maternal care for fetal problem, unspecified, second trimester, fetus 2
Exclusion: Pregnancy	036.92X3	Maternal care for fetal problem, unspecified, second trimester, fetus 3
Exclusion: Pregnancy	036.92X4	Maternal care for fetal problem, unspecified, second trimester, fetus 4
Exclusion: Pregnancy	036.92X5	Maternal care for fetal problem, unspecified, second trimester, fetus 5
Exclusion: Pregnancy	036.92X9	Maternal care for fetal problem, unspecified, second trimester, other fetus
Exclusion: Pregnancy	036.93	Maternal care for fetal problem, unspecified, third trimester
Exclusion: Pregnancy	036.930	
Exclusion: Pregnancy	036.93X0	Maternal care for fetal problem, unspecified, third trimester, not applicable or unspecified
Exclusion: Pregnancy	036.93X1	Maternal care for fetal problem, unspecified, third trimester, fetus 1
Exclusion: Pregnancy	036.93X2	Maternal care for fetal problem, unspecified, third trimester, fetus 2
Exclusion: Pregnancy	036.93X3	Maternal care for fetal problem, unspecified, third trimester, fetus 3
Exclusion: Pregnancy	036.93X4	Maternal care for fetal problem, unspecified, third trimester, fetus 4
Exclusion: Pregnancy	036.93X5	Maternal care for fetal problem, unspecified, third trimester, fetus 5
Exclusion: Pregnancy	036.93X9	Maternal care for fetal problem, unspecified, third trimester, other fetus
Exclusion: Pregnancy	040.1	Polyhydramnios, first trimester
Exclusion: Pregnancy	040.1XX0	Polyhydramnios, first trimester, not applicable or unspecified
Exclusion: Pregnancy	040.1XX1	Polyhydramnios, first trimester, fetus 1
Exclusion: Pregnancy	040.1XX2	Polyhydramnios, first trimester, fetus 2
Exclusion: Pregnancy	040.1XX3	Polyhydramnios, first trimester, fetus 3
Exclusion: Pregnancy	040.1XX4	Polyhydramnios, first trimester, fetus 4
Exclusion: Pregnancy	040.1XX5	Polyhydramnios, first trimester, fetus 5
Exclusion: Pregnancy	040.1XX9	Polyhydramnios, first trimester, other fetus
Exclusion: Pregnancy	040.2	Polyhydramnios, second trimester
Exclusion: Pregnancy	040.2XX0	Polyhydramnios, second trimester, not applicable or unspecified
Exclusion: Pregnancy	040.2XX1	Polyhydramnios, second trimester, fetus 1
Exclusion: Pregnancy	040.2XX2	Polyhydramnios, second trimester, fetus 2
Exclusion: Pregnancy	040.2XX3	Polyhydramnios, second trimester, fetus 3
Exclusion: Pregnancy	040.2XX4	Polyhydramnios, second trimester, fetus 4
Exclusion: Pregnancy	040.2XX5	Polyhydramnios, second trimester, fetus 5
Exclusion: Pregnancy	040.2XX9	Polyhydramnios, second trimester, other fetus
Exclusion: Pregnancy	040.3	Polyhydramnios, third trimester
Exclusion: Pregnancy	040.3XX	
Exclusion: Pregnancy	040.3XX0	Polyhydramnios, third trimester, not applicable or unspecified
Exclusion: Pregnancy	040.3XX1	Polyhydramnios, third trimester, fetus 1
Exclusion: Pregnancy	040.3XX2	Polyhydramnios, third trimester, fetus 2
Exclusion: Pregnancy	040.3XX3	Polyhydramnios, third trimester, fetus 3
Exclusion: Pregnancy	040.3XX4	Polyhydramnios, third trimester, fetus 4
Exclusion: Pregnancy	040.3XX5	Polyhydramnios, third trimester, fetus 5
Exclusion: Pregnancy	040.3XX9	Polyhydramnios, third trimester, other fetus
Exclusion: Pregnancy	040.3XX0	
Exclusion: Pregnancy	040.9	Polyhydramnios, unspecified trimester
Exclusion: Pregnancy	040.909	
Exclusion: Pregnancy	040.9X	
Exclusion: Pregnancy	040.9XX0	Polyhydramnios, unspecified trimester, not applicable or unspecified
Exclusion: Pregnancy	040.9XX1	Polyhydramnios, unspecified trimester, fetus 1
Exclusion: Pregnancy	040.9XX2	Polyhydramnios, unspecified trimester, fetus 2
Exclusion: Pregnancy	040.9XX3	Polyhydramnios, unspecified trimester, fetus 3
Exclusion: Pregnancy	040.9XX4	Polyhydramnios, unspecified trimester, fetus 4
Exclusion: Pregnancy	040.9XX5	Polyhydramnios, unspecified trimester, fetus 5
Exclusion: Pregnancy	040.9XX9	Polyhydramnios, unspecified trimester, other fetus
Exclusion: Pregnancy	041.01	Oligohydramnios, first trimester
Exclusion: Pregnancy	041.013	
Exclusion: Pregnancy	041.01X0	Oligohydramnios, first trimester, not applicable or unspecified
Exclusion: Pregnancy	041.01X1	Oligohydramnios, first trimester, fetus 1
Exclusion: Pregnancy	041.01X2	Oligohydramnios, first trimester, fetus 2
Exclusion: Pregnancy	041.01X3	Oligohydramnios, first trimester, fetus 3
Exclusion: Pregnancy	041.01X4	Oligohydramnios, first trimester, fetus 4
Exclusion: Pregnancy	041.01X5	Oligohydramnios, first trimester, fetus 5
Exclusion: Pregnancy	041.01X9	Oligohydramnios, first trimester, other fetus
Exclusion: Pregnancy	041.02	Oligohydramnios, second trimester
Exclusion: Pregnancy	041.02X0	Oligohydramnios, second trimester, not applicable or unspecified
Exclusion: Pregnancy	041.02X1	Oligohydramnios, second trimester, fetus 1
Exclusion: Pregnancy	041.02X2	Oligohydramnios, second trimester, fetus 2
Exclusion: Pregnancy	041.02X3	Oligohydramnios, second trimester, fetus 3
Exclusion: Pregnancy	041.02X4	Oligohydramnios, second trimester, fetus 4
Exclusion: Pregnancy	041.02X5	Oligohydramnios, second trimester, fetus 5
Exclusion: Pregnancy	041.02X9	Oligohydramnios, second trimester, other fetus
Exclusion: Pregnancy	041.93	Disorder of amniotic fluid and membranes, unspecified, third trimester
Exclusion: Pregnancy	041.93X0	Disorder of amniotic fluid and membranes, unspecified, third trimester, not applicable or unspecified
Exclusion: Pregnancy	041.93X1	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 1
Exclusion: Pregnancy	041.93X2	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 2
Exclusion: Pregnancy	041.93X3	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 3
Exclusion: Pregnancy	041.93X4	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 4
Exclusion: Pregnancy	041.93X5	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 5
Exclusion: Pregnancy	041.93X9	Disorder of amniotic fluid and membranes, unspecified, third trimester, other fetus

Appendix A: Codes

Variables	Codes
Exclusion: Batriatric surgery	0DB64Z3
Exclusion: Batriatric surgery	0DB60ZZ
Exclusion: Batriatric surgery	0DB67ZZ
Exclusion: Batriatric surgery	0DB63ZZ
Exclusion: Batriatric surgery	0D160JA
Exclusion: Batriatric surgery	0D1607A
Exclusion: Batriatric surgery	0D160KA
Exclusion: Batriatric surgery	0D160ZA
Exclusion: Batriatric surgery	0D1687A
Exclusion: Batriatric surgery	0D168JA
Exclusion: Batriatric surgery	0D168ZA
Exclusion: Batriatric surgery	0D16479
Exclusion: Batriatric surgery	0D1647A
Exclusion: Batriatric surgery	0D164J9
Exclusion: Batriatric surgery	0D164JA
Exclusion: Batriatric surgery	0D164K9
Exclusion: Batriatric surgery	0D164KA
Exclusion: Batriatric surgery	0D164Z9
Exclusion: Batriatric surgery	0D164ZA
Exclusion: Batriatric surgery	0D16079
Exclusion: Batriatric surgery	0D160J9
Exclusion: Batriatric surgery	0D160K9
Exclusion: Batriatric surgery	0D160Z9
Exclusion: Batriatric surgery	0D16879
Exclusion: Batriatric surgery	0D168J9
Exclusion: Batriatric surgery	0D168K9
Exclusion: Batriatric surgery	0D168KA
Exclusion: Batriatric surgery	0D168Z9
Exclusion: Batriatric surgery	0DV64CZ
Exclusion: Batriatric surgery	0DQ64ZZ
Exclusion: Batriatric surgery	0DQ60ZZ
Exclusion: Batriatric surgery	0DQ63ZZ
Exclusion: Batriatric surgery	0DQ67ZZ
Exclusion: Batriatric surgery	0DQ68ZZ
Exclusion: Batriatric surgery	0DV60CZ
Exclusion: Batriatric surgery	0DV60DZ
Exclusion: Batriatric surgery	0DV60ZZ
Exclusion: Batriatric surgery	0DV63CZ
Exclusion: Batriatric surgery	0DV63DZ
Exclusion: Batriatric surgery	0DV63ZZ
Exclusion: Batriatric surgery	0DV64DZ
Exclusion: Batriatric surgery	0DV64ZZ
Exclusion: Batriatric surgery	0DV67ZZ
Exclusion: Batriatric surgery	0DV68ZZ
Exclusion: Batriatric surgery	0D160ZB
Exclusion: Batriatric surgery	0DB80ZZ
Exclusion: Batriatric surgery	0DB90ZZ
Exclusion: Batriatric surgery	0DBB0ZZ
Exclusion: Batriatric surgery	0F190Z3
Exclusion: Batriatric surgery	0D190Z9
Exclusion: Batriatric surgery	0D190ZA
Exclusion: Batriatric surgery	0D190ZB
Exclusion: Batriatric surgery	0D194Z9
Exclusion: Batriatric surgery	0D194ZA
Exclusion: Batriatric surgery	0D194ZB
Exclusion: Batriatric surgery	0D198Z9
Exclusion: Batriatric surgery	0D198ZA
Exclusion: Batriatric surgery	0D198ZB
Exclusion: Batriatric surgery	0D1A0ZA
Exclusion: Batriatric surgery	0D1A0ZB
Exclusion: Batriatric surgery	0D1A4ZA
Exclusion: Batriatric surgery	0D1A4ZB
Exclusion: Batriatric surgery	0D1A8ZA
Exclusion: Batriatric surgery	0D1A8ZB
Exclusion: Batriatric surgery	0D1A8ZH
Exclusion: Batriatric surgery	0D1B0ZB
Exclusion: Batriatric surgery	0D1B4ZB
Exclusion: Batriatric surgery	0D1B8ZB
Exclusion: Batriatric surgery	0D1B8ZH

Appendix A: Codes

Variables	Description
Exclusion: HIV/AIDS	AMPRENAVIR/VITAMIN E/PROPYLENE GLYCOL
Exclusion: HIV/AIDS	DARUNAVIR ETH/COBICISTAT/EMTRICITABINE/TENOFOVIR ALAFENAMIDE
Exclusion: HIV/AIDS	DIDANOSINE/SODIUM CITRATE
Exclusion: HIV/AIDS	DOLUTEGRAVIR SODIUM/LAMIVUDINE
Exclusion: HIV/AIDS	DORAVIRINE
Exclusion: HIV/AIDS	EFAVIRENZ/LAMIVUDINE/TENOFOVIR DISOPROXIL FUMARATE
Exclusion: HIV/AIDS	ELVITEGRAVIR
Exclusion: HIV/AIDS	EMTRICITABINE
Exclusion: HIV/AIDS	EMTRICITABINE/RILPIVIRINE HCL/TENOFOVIR ALAFENAMIDE FUMARATE
Exclusion: HIV/AIDS	EMTRICITABINE/RILPIVIRINE HCL/TENOFOVIR DISOPROXIL FUMARATE
Exclusion: HIV/AIDS	EMTRICITABINE/TENOFOVIR ALAFENAMIDE FUMARATE
Exclusion: HIV/AIDS	IBALIZUMAB-UIYK
Exclusion: HIV/AIDS	MARAVIROC
Exclusion: HIV/AIDS	RILPIVIRINE HCL
Exclusion: HIV/AIDS	SAQUINAVIR
Exclusion: HIV/AIDS	TENOFOVIR ALAFENAMIDE
Exclusion: HIV/AIDS	TIPRANAVIR/VITAMIN E TPGS
Exclusion: HIV/AIDS	AMPRENAVIR/VITAMIN E
Exclusion: HIV/AIDS	ATAZANAVIR SULFATE/COBICISTAT
Exclusion: HIV/AIDS	BICTEGRAVIR SODIUM/EMTRICITABINE/TENOFOVIR ALAFENAMIDE FUMAR
Exclusion: HIV/AIDS	COBICISTAT
Exclusion: HIV/AIDS	DOLUTEGRAVIR SODIUM/RILPIVIRINE HCL
Exclusion: HIV/AIDS	DORAVIRINE/LAMIVUDINE/TENOFOVIR DISOPROXIL FUMARATE
Exclusion: HIV/AIDS	EFAVIRENZ/EMTRICITABINE/TENOFOVIR DISOPROXIL FUMARATE
Exclusion: HIV/AIDS	TIPRANAVIR
Exclusion: HIV/AIDS	DARUNAVIR ETHANOLATE/COBICISTAT
Exclusion: HIV/AIDS	ELVITEGRAVIR/COBICISTAT/EMTRICITABINE/TENOFOVIR DISOPROXIL
Exclusion: HIV/AIDS	ENFUVRTIDE
Exclusion: HIV/AIDS	LAMIVUDINE/TENOFOVIR DISOPROXIL FUMARATE
Exclusion: HIV/AIDS	ABACAVIR SULFATE/DOLUTEGRAVIR SODIUM/LAMIVUDINE
Exclusion: HIV/AIDS	ABACAVIR SULFATE/LAMIVUDINE/ZIDOVUDINE
Exclusion: HIV/AIDS	ETRAVIRINE
Exclusion: HIV/AIDS	FOSAMPRENAVIR CALCIUM
Exclusion: HIV/AIDS	ELVITEGRAVIR/COBICISTAT/EMTRICITABINE/TENOFOVIR ALAFENAMIDE
Exclusion: HIV/AIDS	ZALCITABINE
Exclusion: HIV/AIDS	DIDANOSINE/CALCIUM CARBONATE/MAGNESIUM
Exclusion: HIV/AIDS	RALTEGRAVIR POTASSIUM
Exclusion: HIV/AIDS	SAQUINAVIR MESYLATE
Exclusion: HIV/AIDS	DELAVIRDINE MESYLATE
Exclusion: HIV/AIDS	DOLUTEGRAVIR SODIUM
Exclusion: HIV/AIDS	ABACAVIR SULFATE/LAMIVUDINE
Exclusion: HIV/AIDS	LOPINAVIR/RITONAVIR
Exclusion: HIV/AIDS	ABACAVIR SULFATE
Exclusion: HIV/AIDS	DARUNAVIR ETHANOLATE
Exclusion: HIV/AIDS	EFAVIRENZ
Exclusion: HIV/AIDS	EMTRICITABINE/TENOFOVIR DISOPROXIL FUMARATE
Exclusion: HIV/AIDS	NELFINAVIR MESYLATE

Appendix A: Codes

Exclusion: HIV/AIDS	RITONAVIR
Exclusion: HIV/AIDS	TENOFOVIR DISOPROXIL FUMARATE
Exclusion: HIV/AIDS	ATAZANAVIR SULFATE
Exclusion: HIV/AIDS	INDINAVIR SULFATE
Exclusion: HIV/AIDS	DIDANOSINE
Exclusion: HIV/AIDS	NEVIRAPINE
Exclusion: HIV/AIDS	STAVUDINE
Exclusion: HIV/AIDS	LAMIVUDINE/ZIDOVUDINE
Exclusion: HIV/AIDS	LAMIVUDINE
Exclusion: HIV/AIDS	ZIDOVUDINE

Appendix B: Table 1

Variable	UNMATCHED			MATCHED		
	Glimepiride vs Sitagliptin			Glimepiride vs Sitagliptin		
	Sitagliptin 2,011	Glimepiride 4,392	St. Diff	Sitagliptin 1,974	Glimepiride 1,974	St. Diff
Number of patients						
Year of Cohort Entry Date						
...2010; n (%)	96 (4.8%)	175 (4.0%)	0.04	93 (4.7%)	99 (5.0%)	-0.01
...2011; n (%)	78 (3.9%)	120 (2.7%)	0.07	75 (3.8%)	80 (4.1%)	-0.02
...2012; n (%)	80 (4.0%)	148 (3.4%)	0.03	78 (4.0%)	88 (4.5%)	-0.02
...2013; n (%)	113 (5.6%)	248 (5.6%)	0.00	113 (5.7%)	121 (6.1%)	-0.02
...2014; n (%)	181 (9.0%)	321 (7.3%)	0.06	174 (8.8%)	172 (8.7%)	0.00
...2015; n (%)	160 (8.0%)	444 (10.1%)	-0.07	159 (8.1%)	141 (7.1%)	0.04
...2016; n (%)	231 (11.5%)	564 (12.8%)	-0.04	229 (11.6%)	214 (10.8%)	0.03
...2017; n (%)	285 (14.2%)	703 (16.0%)	-0.05	278 (14.1%)	277 (14.0%)	0.00
...2018; n (%)	306 (15.2%)	738 (16.8%)	-0.04	303 (15.3%)	300 (15.2%)	0.00
...2019; n (%)	344 (17.1%)	693 (15.8%)	0.04	336 (17.0%)	348 (17.6%)	-0.02
...2020; n (%)	137 (6.8%)	238 (5.4%)	0.06	136 (6.9%)	134 (6.8%)	0.00
Age						
...mean (sd)	66.03 (10.31)	65.19 (10.64)	0.08	65.97 (10.32)	66.15 (10.29)	-0.02
...median [IQR]	68 [60, 73]	67 [59, 72]		68 [60, 73]	68 [61, 73]	
Gender						
...Male; n (%)	995 (49.5%)	2430 (55.3%)	-0.12	986 (49.9%)	986 (49.9%)	0.00
...Female; n (%)	1016 (50.5%)	1962 (44.7%)	0.12	988 (50.1%)	988 (50.1%)	0.00
Race						
...White; n (%)	959 (47.7%)	2342 (53.3%)	-0.11	950 (48.1%)	922 (46.7%)	0.03
...Black or African American; n (%)	154 (7.7%)	388 (8.8%)	-0.04	152 (7.7%)	146 (7.4%)	0.01
...Asian; n (%)	213 (10.6%)	341 (7.8%)	0.10	205 (10.4%)	203 (10.3%)	0.00
...Others; n (%)	685 (34.1%)	1321 (30.1%)	0.09	667 (33.8%)	703 (35.6%)	-0.04
Region						
...Northeast; n (%)	232 (11.5%)	471 (10.7%)	0.03	232 (11.8%)	242 (12.3%)	-0.02
...Midwest; n (%)	176 (8.8%)	675 (15.4%)	-0.20	176 (8.9%)	147 (7.4%)	0.05
...South; n (%)	917 (45.6%)	2278 (51.9%)	-0.13	914 (46.3%)	893 (45.2%)	0.02
...West; n (%)	682 (33.9%)	967 (22.0%)	0.27	652 (33.0%)	691 (35.0%)	-0.04
...Other unknown/missing; n (%)	4 (0.2%)	1 (<1%)	0.05	0 (0.0%)	1 (0.1%)	-0.04
General						
Smoking; n (%)	140 (7.0%)	356 (8.1%)	-0.04	137 (6.9%)	128 (6.5%)	0.02
Obesity; n (%)	405 (20.1%)	982 (22.4%)	-0.06	395 (20.0%)	450 (22.8%)	-0.07
Overweight; n (%)	170 (8.5%)	294 (6.7%)	0.07	167 (8.5%)	138 (7.0%)	0.06
Obesity or overweight; n (%)	556 (27.6%)	1235 (28.1%)	-0.01	544 (27.6%)	557 (28.2%)	-0.01
Index						
Combined comorbidity score: 180 days						
...mean (sd)	0.63 [1.60]	0.57 [1.53]	0.04	0.62 [1.60]	0.65 [1.57]	-0.02
...median [IQR]	0 [-1, 1]	1 [-1, 1]		0 [-1, 1]	0 [-1, 1]	
Frailty Score: 180 days						
...mean (sd)	0.14 (0.03)	0.14 (0.03)	0.00	0.14 (0.03)	0.14 (0.03)	0.00
...median [IQR]	0.13 [0.12, 0.15]	0.13 [0.12, 0.15]		0.13 [0.12, 0.15]	0.13 [0.12, 0.15]	
Baseline Lab value HbA1c						
...mean (sd)	7.60 (0.47)	7.65 (0.48)	-0.11	7.60 (0.47)	7.60 (0.48)	0.00
...median [IQR]	7.6 [7.2, 8]	7.6 [7.2, 8]		7.6 [7.2, 8]	7.6 [7.2, 8]	
Cardiovascular						
Hypertension; n (%)	1573 (78.2%)	3484 (79.3%)	-0.03	1545 (78.3%)	1564 (79.2%)	-0.02
Hyperlipidemia; n (%)	1532 (76.2%)	3297 (75.1%)	0.03	1503 (76.1%)	1506 (76.3%)	0.00
Old MI; n (%)	22 (1.1%)	67 (1.5%)	-0.04	22 (1.1%)	27 (1.4%)	-0.03
Acute MI; n (%)	5 (0.2%)	6 (0.1%)	0.03	5 (0.3%)	4 (0.2%)	0.02
ACS/unstable angina; n (%)	6 (0.3%)	30 (0.7%)	-0.06	6 (0.3%)	17 (0.9%)	-0.08
Stable angina; n (%)	49 (2.4%)	107 (2.4%)	0.00	47 (2.4%)	50 (2.5%)	-0.01
Coronary atherosclerosis and other forms of chronic ischemic heart disease; n (%)	229 (11.4%)	521 (11.9%)	-0.02	224 (11.3%)	234 (11.9%)	-0.02
History of CABG or PTCA; n (%)	42 (2.1%)	105 (2.4%)	-0.02	39 (2.0%)	51 (2.6%)	-0.04
CVD combination; n (%)	260 (12.9%)	584 (13.3%)	-0.01	254 (12.9%)	260 (13.2%)	-0.01
Stroke (ischemic or hemorrhagic); n (%)	16 (0.8%)	48 (1.1%)	-0.03	16 (0.8%)	16 (0.8%)	0.00
TIA; n (%)	8 (0.4%)	36 (0.8%)	-0.05	8 (0.4%)	9 (0.5%)	-0.01
Late effects of cerebrovascular disease; n (%)	13 (0.6%)	19 (0.4%)	0.03	13 (0.7%)	8 (0.4%)	0.04
Cerebrovascular disease combination; n (%)	32 (1.6%)	93 (2.1%)	-0.04	32 (1.6%)	32 (1.6%)	0.00
Heart Failure; n (%)	51 (2.5%)	127 (2.9%)	-0.02	51 (2.6%)	50 (2.5%)	0.01
PAD or PAD surgery; n (%)	88 (4.4%)	215 (4.9%)	-0.02	88 (4.5%)	95 (4.8%)	-0.01
Atrial fibrillation; n (%)	80 (4.0%)	198 (4.5%)	-0.02	78 (4.0%)	89 (4.5%)	-0.02
Other cardiac dysrhythmia; n (%)	120 (6.0%)	262 (6.0%)	0.00	118 (6.0%)	117 (5.9%)	0.00
Cardiomyopathy; n (%)	24 (1.2%)	46 (1.0%)	0.02	24 (1.2%)	19 (1.0%)	0.02
Diabetes related						
Hypoglycemia; n (%)	279 (13.9%)	473 (10.8%)	0.09	271 (13.7%)	270 (13.7%)	0.00
Diabetes mellitus without mention of complications; n (%)	1709 (85.0%)	3637 (82.8%)	0.06	1676 (84.9%)	1678 (85.0%)	0.00
Diabetic Foot; n (%)	13 (0.6%)	33 (0.8%)	-0.02	12 (0.6%)	11 (0.6%)	0.00
Diabetic nephropathy; n (%)	262 (13.0%)	560 (12.8%)	0.01	257 (13.0%)	265 (13.4%)	-0.01
Diabetic Neuropathy; n (%)	292 (14.5%)	666 (15.2%)	-0.02	286 (14.5%)	288 (14.6%)	0.00
Diabetic Retinopathy; n (%)	86 (4.3%)	186 (4.2%)	0.00	84 (4.3%)	85 (4.3%)	0.00
Diabetes with unspecified complications; n (%)	83 (4.1%)	173 (3.9%)	0.01	80 (4.1%)	71 (3.6%)	0.03
Diabetes with peripheral circulatory disorders; n (%)	20 (1.0%)	58 (1.3%)	-0.03	20 (1.0%)	24 (1.2%)	-0.02
Lower-limb amputations; n (%)	2 (0.1%)	12 (0.3%)	-0.04	2 (0.1%)	5 (0.3%)	-0.04
Diabetic ketoacidosis; n (%)	1 (<1%)	1 (<1%)	0.01	1 (0.1%)	0 (0.0%)	0.04
Hyperosmolar hyperglycemic nonketotic syndrome (HONK); n (%)	5 (0.2%)	14 (0.3%)	-0.02	5 (0.3%)	6 (0.3%)	0.00
Renal disease						
CKD Stage 1-2; n (%)	97 (4.8%)	189 (4.3%)	0.02	94 (4.8%)	99 (5.0%)	-0.01
CKD Stage 3-4; n (%)	130 (6.5%)	300 (6.8%)	-0.01	126 (6.4%)	141 (7.1%)	-0.03
CKD Stage NOS; n (%)	22 (1.1%)	67 (1.5%)	-0.04	21 (1.1%)	32 (1.6%)	-0.04
Miscellaneous renal disease; n (%)	52 (2.6%)	145 (3.3%)	-0.04	52 (2.6%)	41 (2.1%)	0.03
Chronic kidney disease stages I-IV and NOS; n (%)	233 (11.6%)	494 (11.2%)	0.01	227 (11.5%)	242 (12.3%)	-0.02
Nervous system						
Alzheimer and other Dementia Disease; n (%)	33 (1.6%)	68 (1.5%)	0.01	32 (1.6%)	45 (2.3%)	-0.05
Parkinson's disease; n (%)	9 (0.4%)	12 (0.3%)	0.02	9 (0.5%)	7 (0.4%)	0.01
Delirium; n (%)	3 (0.1%)	14 (0.3%)	-0.04	3 (0.2%)	7 (0.4%)	-0.04
Psychosis; n (%)	7 (0.3%)	20 (0.5%)	-0.03	7 (0.4%)	12 (0.6%)	-0.03
Anxiety; n (%)	131 (6.5%)	262 (6.0%)	0.02	128 (6.5%)	115 (5.8%)	0.03
Depression; n (%)	111 (5.5%)	218 (5.0%)	0.02	108 (5.5%)	114 (5.8%)	-0.01
Other						
Obstructive sleep apnea; n (%)	188 (9.3%)	406 (9.2%)	0.00	182 (9.2%)	189 (9.6%)	-0.01
COPD; n (%)	115 (5.7%)	228 (5.2%)	0.02	111 (5.6%)	119 (6.0%)	-0.02
Asthma; n (%)	83 (4.1%)	132 (3.0%)	0.06	78 (4.0%)	82 (4.2%)	-0.01
Osteoporosis; n (%)	69 (3.4%)	142 (3.2%)	0.01	67 (3.4%)	70 (3.5%)	-0.01
Osteoarthritis; n (%)	268 (13.3%)	545 (12.4%)	0.03	258 (13.1%)	248 (12.6%)	0.01
Syncope; n (%)	22 (1.1%)	33 (0.8%)	0.03	20 (1.0%)	18 (0.9%)	0.01
Falls; n (%)	33 (1.6%)	54 (1.2%)	0.03	32 (1.6%)	23 (1.2%)	0.03
NASH/NAFLD; n (%)	66 (3.3%)	128 (2.9%)	0.02	64 (3.2%)	59 (3.0%)	0.01
Disorders of gallbladder, biliary tract and pancreas; n (%)	26 (1.3%)	49 (1.1%)	0.02	25 (1.3%)	24 (1.2%)	0.01
Vertebral and non-vertebral fractures; n (%)	9 (0.4%)	23 (0.5%)	-0.01	9 (0.5%)	9 (0.5%)	0.00

Appendix B: Table 1

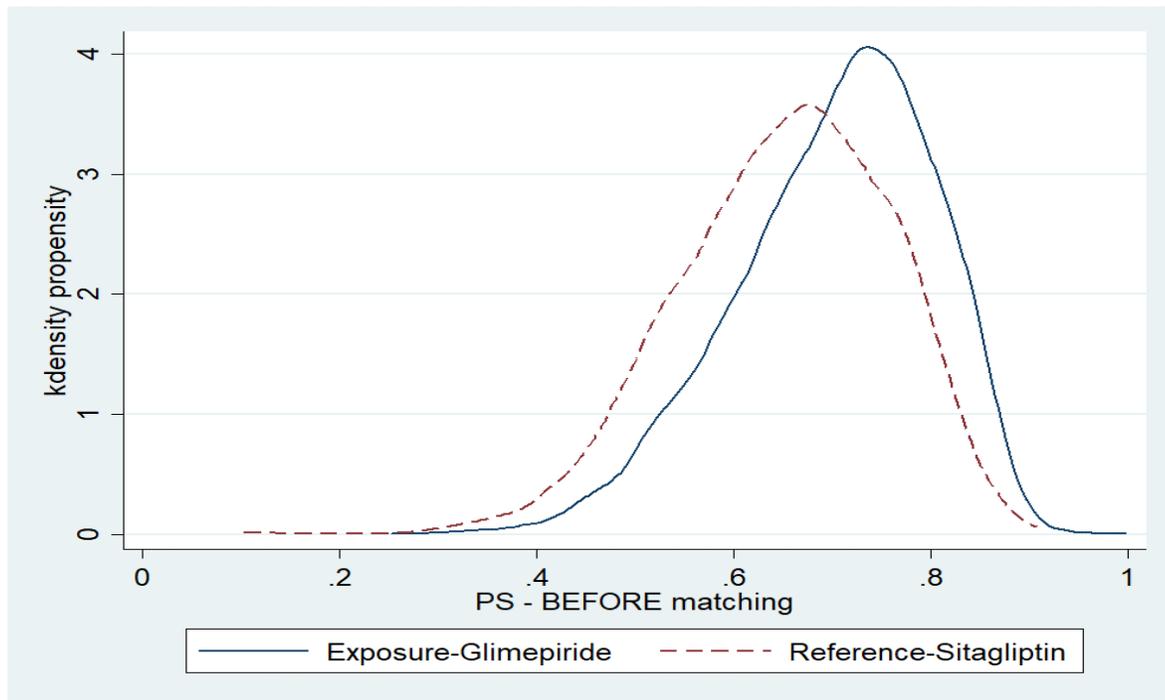
Medications			
ACEI/ARBs; n (%)	1496 (74.4%)	3271 (74.5%)	0.00
Beta blockers; n (%)	597 (29.7%)	1342 (30.6%)	-0.02
Calcium channel blockers; n (%)	569 (28.3%)	1251 (28.5%)	0.00
Thiazide; n (%)	611 (30.4%)	1421 (32.4%)	-0.04
Diuretics; n (%)	695 (34.6%)	1639 (37.3%)	-0.06
Anti-arrhythmics; n (%)	8 (0.4%)	30 (0.7%)	-0.04
Digoxin; n (%)	15 (0.7%)	42 (1.0%)	-0.03
Anticoagulants; n (%)	73 (3.6%)	179 (4.1%)	-0.03
Anticonvulsants; n (%)	247 (12.3%)	477 (10.9%)	0.04
Statins; n (%)	1561 (77.6%)	3276 (74.6%)	0.07
Other lipid-lowering drugs; n (%)	233 (11.6%)	487 (11.1%)	0.02
NSAIDs (without aspirin); n (%)	323 (16.1%)	581 (13.2%)	0.08
Aspirin ; n (%)	13 (0.6%)	21 (0.5%)	0.01
Antiosteoporosis medications; n (%)	77 (3.8%)	134 (3.1%)	0.04
Opioids; n (%)	293 (14.6%)	679 (15.5%)	-0.03
Antidepressants; n (%)	425 (21.1%)	795 (18.1%)	0.08
Anxiolytics/hypnotics; n (%)	70 (3.5%)	172 (3.9%)	-0.02
Antipsychotics; n (%)	34 (1.7%)	68 (1.5%)	0.02
Antiparkinsonian medications; n (%)	38 (1.9%)	63 (1.4%)	0.04
Benzodiazepine; n (%)	148 (7.4%)	330 (7.5%)	0.00
Dementia medications; n (%)	30 (1.5%)	50 (1.1%)	0.04
PPIs; n (%)	401 (19.9%)	804 (18.3%)	0.04
Healthcare utilization			
Unique generic prescriptions			
...mean (sd)	8.76 (3.85)	8.34 (3.53)	0.11
...median [IQR]	6 [8, 11]	6 [8, 10]	
Unique brand prescriptions			
...mean (sd)	8.85 (3.91)	8.42 (3.57)	0.11
...median [IQR]	6 [8, 11]	6 [8, 10]	
Number of office visit in the baseline			
...mean (sd)	4.91 (3.59)	4.46 (3.30)	0.13
...median [IQR]	4 [2, 6]	4 [2, 6]	
Number of ED visit in the baseline			
...mean (sd)	0.08 (0.32)	0.10 (0.35)	-0.06
...median [IQR]	0 [0, 0]	0 [0, 0]	
Number of Hospital days			
...mean (sd)	0.05 (0.42)	0.07 (0.70)	-0.03
...median [IQR]	0 [0, 0]	0 [0, 0]	
Hospitalization; n (%)	33 (1.6%)	81 (1.8%)	-0.02
Bone mineral density test (DXA)			
...mean (sd)	0.07 (0.32)	0.06 (0.31)	0.03
...median [IQR]	0 [0, 0]	0 [0, 0]	
Number of Endocrinologist visits in the baseline			
...mean (sd)	0.10 (0.49)	0.12 (0.52)	-0.04
...median [IQR]	0 [0, 0]	0 [0, 0]	
Basic or comprehensive metabolic blood chemistry test; n (%)	1723 (85.7%)	3717 (84.6%)	0.03
PSA test or Prostate exam for DRE; n (%)	383 (19.0%)	863 (19.6%)	-0.02
Flexible Sigmoidoscopy or colonoscopy or CT virtual colonoscopy; n (%)	113 (5.6%)	198 (4.5%)	0.05
Mammogram; n (%)	298 (14.8%)	592 (13.5%)	0.04
Pap smear; n (%)	81 (4.0%)	142 (3.2%)	0.04
Flu vaccine; n (%)	465 (23.1%)	855 (19.5%)	0.09
Pneumococcal vaccine; n (%)	436 (21.7%)	852 (19.4%)	0.06
SES proxy			
Copay for pharmacy cost			
...mean (sd)	203.09 (248.74)	186.80 (244.67)	0.07
...median [IQR]	116 [41.25, 280]	102 [39.83, 243.68]	
Average copay per prescription			
...mean (sd)	11.41 (12.33)	10.94 (12.38)	0.04
...median [IQR]	7.92 [3.1, 15.94]	7.7 [3.3, 14.1]	
Business type			
...Commercial; n (%)	560 (27.8%)	1390 (31.6%)	-0.08
...Medicare; n (%)	1451 (72.2%)	3002 (68.4%)	0.08

1469 (74.4%)	1485 (75.2%)	-0.02
589 (29.8%)	566 (28.7%)	0.02
556 (28.2%)	565 (28.6%)	-0.01
602 (30.5%)	568 (28.8%)	0.04
680 (34.4%)	662 (33.5%)	0.02
7 (0.4%)	19 (1.0%)	-0.07
14 (0.7%)	26 (1.3%)	-0.06
68 (3.4%)	79 (4.0%)	-0.03
241 (12.2%)	258 (13.1%)	-0.03
1528 (77.4%)	1559 (79.0%)	-0.04
229 (11.6%)	216 (10.9%)	0.02
313 (15.9%)	281 (14.2%)	0.05
13 (0.7%)	9 (0.5%)	0.03
73 (3.7%)	73 (3.7%)	0.00
286 (14.5%)	276 (14.0%)	0.01
411 (20.8%)	418 (21.2%)	-0.01
68 (3.4%)	71 (3.6%)	-0.01
32 (1.6%)	35 (1.8%)	-0.02
36 (1.8%)	34 (1.7%)	0.01
145 (7.3%)	141 (7.1%)	0.01
30 (1.5%)	33 (1.7%)	-0.02
390 (19.8%)	402 (20.4%)	-0.01
8.70 (3.80)	8.76 (3.70)	-0.02
8 [6, 11]	8 [6, 11]	
8.79 (3.86)	8.86 (3.75)	-0.02
8 [6, 11]	8 [6, 11]	
4.82 (3.37)	4.92 (3.70)	-0.03
4 [2, 6]	4 [2, 6]	
0.08 (0.32)	0.08 (0.30)	0.00
0 [0, 0]	0 [0, 0]	
0.05 (0.40)	0.04 (0.38)	0.03
0 [0, 0]	0 [0, 0]	
30 (1.5%)	28 (1.4%)	0.01
0.07 (0.33)	0.07 (0.34)	0.00
0 [0, 0]	0 [0, 0]	
0.10 (0.50)	0.09 (0.43)	0.02
0 [0, 0]	0 [0, 0]	
1689 (85.6%)	1688 (85.5%)	0.00
378 (19.1%)	384 (19.5%)	-0.01
110 (5.6%)	101 (5.1%)	0.02
289 (14.6%)	303 (15.3%)	-0.02
78 (4.0%)	82 (4.2%)	-0.01
452 (22.9%)	463 (23.5%)	-0.01
423 (21.4%)	427 (21.6%)	0.00
200.41 (245.31)	202.47 (254.55)	-0.01
114.81 [40.8, 278.95]	115.46 [44.22, 270.03]	
11.38 (12.37)	11.55 (13.33)	-0.01
7.8 [3.05, 15.93]	7.9 [3.49, 14.62]	
551 (27.9%)	531 (26.9%)	0.02
1423 (72.1%)	1443 (73.1%)	-0.02

Appendix B: Propensity

Optum: Glimepiride vs Sitagliptin

BEFORE PS MATCHING



The c-statistics for the propensity score model, pre-matching was 0.6388 and post-matching was 0.5476

AFTER PS MATCHING

